

# CONSUMERS' RESEARCH

## Bulletin



March 1949  
CONTENTS

### *For the Home*

Linoleums, and Similar Floor Coverings	5
Poisoning Hazard in Breakage of Fluorescent Lamps	17
Paint Quality Not So Good—Contrary to Trade Claims	18
The Termite Problem	19
Buying a Piano—II	22

### *For the Automobile*

Driving Habits Affect Gasoline Consumption	13
Tire Chain Applier	15

### *Television and Phonograph Equipment*

Two TV Receivers	14
Better Not Buy a Record-Player Now	16

### *Miscellaneous*

Dictating Machines	10
35 mm. Cameras	25

### *Features*

Off the Editor's Chest	2
The Consumers' Observation Post	3
Brief 1949 Cumulative Index	26
Ratings of Motion Pictures	27
Phonograph Records	31

Walter F. Grueninger

# CONSUMERS' RESEARCH



Vol. 23 • No. 3

## BULLETIN

March 1949

### Off the Editor's Chest

WHEN a woman goes into a grocery store for the day's provisions, she does not count on the clerk's including in her order, free of charge, a peck of potatoes or a bunch of carrots, nor does a man expect to be given a pair of socks when he buys a new shirt. But in many cases either would be surprised if an architect friend sent them a bill for advice he gave in casual conversation on the most effective method for enlarging their kitchen, or if an accountant friend charged them for counsel on how to deduct depreciation on rental property in calculating income taxes. Yet the value of the time spent in study and in gaining experience that enabled both professional men to provide the needed information very likely amounted to more than was spent by the producer and distributor in making available in the market the vegetables or wearing apparel which the shopper quite naturally was prepared to pay for.

The fact that professional information and advice carry a price tag, like other goods and services, was forcibly brought home to four women recently, when in order to settle a friendly dispute over a bridge game as to whether it was necessary to complete a cut, they wrote a note of inquiry to one of the leading experts in the United States. He replied and enclosed a bill for his services in the amount of \$100. The good ladies, thoroughly shocked at the magnitude of the fee demanded, consulted a lawyer, who advised them to pay it.

Our own experience leads us to believe that the

basis for the average man's and woman's assumption that professional advice should be available for the asking is laid primarily in the schools. Whether it is due to ignorance of the problems of professional men, or to unconcern on the part of the individual teacher for those who must answer students' inquiries, we are unable to determine, but we take a rather dim view of the type of instruction provided when we receive a letter from a student, apparently writing as spokesman for her class, like the following:

I was advised by my chemistry teacher to write you for information concerning certain articles. Please send me the answers to the following questions or give me a source where I can find the information.

1. Does frequently [sic] change of soap injure the skin?
2. Are all cosmetics harmful?
3. What is good for oily complexion? Where can it be bought?
4. What treatment is best for breaking of hair, and where can it be bought?
5. If a customer buys meat that doesn't have the seal of governor [government?] inspection does he have a right to take it back to the one who sold it to him?
6. Why are the ingredients of some food and drinks withheld, not on container?

A stamped self-addressed envelope is enclosed. If you desire to send any additional information I shall be very glad to receive it.

At least it can be said in favor of this corres-

(Continued on page 23)

**Scientific and Technical Experts and Editors:** F. J. Schlink, R. Joyce, M. C. Phillips, A. R. Greenleaf, Charles L. Bernier, and Dwight C. Aten. **Editorial Assistants:** Mary F. Roberts and B. Beam.

Symbols used to indicate sources of data and bases of ratings: A—recommended on basis of quality; AA—regarded as worthy of highest recommendation; B—intermediate with respect to quality; C—not recommended on basis of quality; CR—information from Consumers' Research's own tests or investigations; 1, 2, 3—relative prices, 1 being low, 3 high. (Note that price and quality are completely differentiated in CR's listings; a quality judgment is independent of price; 48, 49—year in which test was made or information obtained or organized by the staff of Consumers' Research. It will be advantageous if you will, whenever possible, send prompt notice of change of address at least 5 weeks before it is to take effect, accompanying your notice with statement of your old address with name in full. At least a month's notice must be given in any case. This rule, however, regarding lone advance notice does not apply to military personnel.)

\*CR will, of course, gladly change addresses for men and women in the services as often as required by changes in station and other circumstances.

\*\*\*For a brief cumulative index of 1949 BULLETINS preceding this issue, see page 26.

CONSUMERS' RESEARCH BULLETIN, issued monthly by Consumers' Research, Inc., Publication Office, Box 429, Easton, Pa. Address orders and correspondence to Consumers' Research, Washington, N.J. Single copy 30c. Subscription price (12 issues) \$3 per year, U.S.A.; Canada and foreign, \$3.50. For libraries, schools, and colleges, a special subscription of nine monthly BULLETINS (October-June, inclusive) is available at \$2; Canada and foreign, \$2.50.

\*Responsibility for all specific statements of fact or opinion at any time made by Consumers' Research lies wholly with the technical director and staff of the organization. Entered as second-class matter November 9, 1934, at the Post Office at Washington, N.J., under the Act of March 3, 1879; additional entry at Easton, Pa. Copyright, 1949, by Consumers' Research, Inc., Washington, N.J. ••• Printed in U.S.A. ••• CONSUMERS' RESEARCH BULLETIN is on file in many school, college, and public libraries and is indexed in Industrial Arts Index and in the Readers' Guide to Periodical Literature.

Note: The material in this Bulletin is protected by copyright. Reprinting is often allowed, but only when special permission has been asked and granted in writing. Use of CR material for any advertising purpose is not permitted.

CORRECTIONS TO CONSUMERS' RESEARCH BULLETIN OF

MARCH 1949

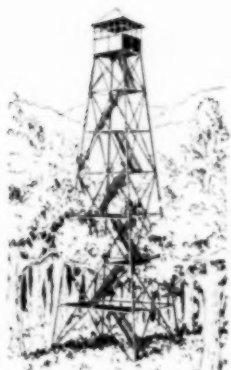
Dictating Machines  
p. 12, col. 2

SoundScriber. The A-Recommended rating applies to recently produced models in which the .025 mfd. condenser between the negative B supply (B-) and chassis has been replaced by a .005 mfd. condenser and the recorder volume control has been insulated from the chassis, thus reducing the shock hazard previously present to a degree that falls within limits CR regards as reasonable. According to the manufacturer, all future production and all machines now in stock will have these changes incorporated; the modifications will reduce the leakage current to a satisfactorily low limit.

p. 13

The manufacturer of the Brush Soundmirror has informed CR that the Soundmirror was not designed for use as an office dictation machine. The correct price for the table-type recorder (Model BK-411) is \$229.50. The price of \$375 mentioned in the Bulletin refers to a portable model. The price of the professional model of the Mall-A-Voice dictation machine was incorrectly given as \$371. Its correct price is \$157.50.





## *The Consumers' Observation Post*

EXCESS WEIGHT is a definite indication of malnutrition, in the opinion of Dr. Jonathan Forman, of Columbus, Ohio. U. S. consumers, it appears, have too much starch in their diets and not enough minerals (and presumably protein). Dr. Forman suggests that if the situation is not remedied soon we shall all have to eat sea kelp to obtain the necessary minerals in our food. The doctor points out also that soil deficiencies are partly to blame for the lack of essential food elements.

\* \* \*

THE TWENTY PERCENT EXCISE TAX ON COSMETICS should be repealed by this session of Congress if women get behind the campaign recommended by the directors of the Toilet Goods Association. The plan is to enclose a little circular in every cosmetic package to remind purchasers about the tax and to suggest that they voice their protests to their congressmen and senators. The idea is an excellent one that might very well be extended to other consumers' goods that were taxed originally to help pay for the war. It always turns out that once a tax is imposed the bureaucrats think up some good reason for continuing it indefinitely.

\* \* \*

SO LONG AS MICE ARE WELL FED they will stick around, is the conclusion to be drawn from scientific studies made at the University of Wisconsin. Other facts brought to light in this careful scrutiny of rodent life were that the two most effective means of ridding premises of mice were the ordinary snap trap and a good hunting cat. Both were found to be more effective than any poison.

\* \* \*

MEN'S SUITS, SHIRTS, AND SHOES are not selling well, and men are apparently staying away from stores in droves, according to trade reports. The result is that wise merchandisers are marking prices down. In New York City, one retailer marked two-pants worsted suits down to \$40 (\$39.95) and is reported to have sold 2000 in a day. In Pittsburgh, Kaufmann advertised worsted suits at \$46 and did right well, while R. H. White in Boston had a "terrific" response to \$45 worsteds. Continued consumer resistance will undoubtedly bring bigger and better results. As we have noted before, it seems to be a bit easier for men to stay out of the stores because they are notoriously fond of wearing their old clothes.

\* \* \*

WASTE IN GOVERNMENT SPENDING takes its toll of taxpayers' cash in the form of higher taxes so that consumers have that much less to spend for the essentials of daily living. One of the most flagrant examples of this sort of thing was described in a recent issue of Electronics, which noted that many manufacturers were currently being asked to bid on new military equipment which differed very little in design from that dumped on the surplus market not so long ago. It appeared that the new specifications had only a few minor changes in them; just enough, the magazine suggests, to keep industry from selling to the government equipment already in stock which the manufacturers had bought back as surplus.

\* \* \*

ADVANTAGES AND DISADVANTAGES OF VARIOUS TYPES OF POTS AND PANS are the subject of a useful little pamphlet entitled "When Buying Pots and Pans," available at 10 cents from the Extension Service, University of Wisconsin, Madison, Wisconsin. Too many pots and pans are not used, and clutter up closets and shelves, particularly in the city dweller's limited space; hence the pamphlet suggests selecting utensils that can do double duty. The different materials

used affect the life and convenience of a pan. Stamped aluminum, the pamphlet points out, is easier to keep clean than cast aluminum, but is stained by certain alkaline foods, household materials, and hard water. Ironware improves with age but rusts if not kept dry and oiled. Alkalies do not discolor enamelware, as they do stamped aluminum, but good enamelware is comparatively expensive. The pamphlet stresses a point long made by CR that a dull finish absorbs heat more quickly than a bright finish, and pans with a dull finish are much more economical of fuel. Thus, in the interests of economy, it is wise not to scrub the bottoms of pans until they shine.

\* \* \*

FUR COATS AND FURS have not sold at all well this past year. The chief obstacle is held to be the 20 percent excise tax which adds a considerable sum to the price of most coats. Some ingenious furriers have discovered a loophole, according to The Wall Street Journal, by which they can produce tax-free fur coats in the lower-price brackets. It appears that unless the fur in a garment at the time of manufacture is worth more than three times the next most valuable component, the coat is not subject to tax. By putting a good pure silk lining in an inexpensive coat such as a hundred dollar mouton, the manufacturer makes a garment on which the consumer need pay no tax. One New York furrier reported that the technique proved to be an effective sales stimulus.

\* \* \*

NAIL DISORDERS due to a nail polish "undercoat" continue to be reported in medical literature. The Journal of the American Medical Association gives a brief summary of 12 cases seen in the period October 1947 to April 1948. The clinical features common to all cases were discoloration of the fingernails, separation of the nail from the nailbed, a variable amount of dark material beneath the nail, and other symptoms. In one case, two fingernails were removed to give the patient relief from the resulting inflammation. The cause of the difficulty is ascribed to an allergy to the solution of phenol-formaldehyde resins and synthetic rubbers in methyl ethyl ketone, which is the type of formula common to several products. One curious feature brought out in the study was that different samples of the same brand of "undercoat" produced widely varied reaction in patch tests; some samples produced strong reactions, while other samples failed to produce any reaction whatever in the same patient. It would appear that manufacturing processes or materials were not as closely standardized or controlled as seems desirable.

\* \* \*

THE EARLY RECOGNITION and adequate treatment of allergy is exceedingly important for the future health and well being of the individual sufferer. Allergic symptoms allowed to carry on unchecked may multiply and become incurable, according to a paper by Dr. Leo H. Crip and Dr. Theodore H. Aaron, of Pittsburgh, which was published in the Journal-Lancet. It appears that a considerable number of cases of asthma, hay fever, eczema, and urticaria first show symptoms in the twenties and thirties of the patient. Prompt attention and diagnosis is indicated in order to prevent further development of the disease and possible complications.

\* \* \*

THE NEW AUTOMOBILE DESIGNS are likely to result in higher costs for keeping bodies free from dents and scratches than hitherto, for not only are the new body forms especially vulnerable to damage from collision and minor parking and other accidents, but there is a shortage of body repairmen. There are said to be about 10 percent more body repairmen than before the war, but the number needed--and made necessary by today's easily bumped, scratched, and damaged bodies--will be considerably over that figure. With the older and simpler cars, body repair was an easy matter. Today's car bodies are more complex structures; costly lamp and other details are mounted in the fenders; front-end grillwork is elaborate and exceedingly expensive to replace in case of accident. Bumpers are located so close to the body surface in order to help reduce the over-all length of car--already far too great for convenience in parking--that they fail to prevent damage to fenders and body parts in even a slight collision. All of these defects in design render it almost impossible to keep a car free from the marks of minor accidents and bumps, and the repair of the bump when it occurs is far more costly than it was a decade ago, as all too many motorists have had occasion to learn recently.

(Continuation of this section is on page 29)



# Linoleums, and Similar Smooth-Surfaced Floor Coverings

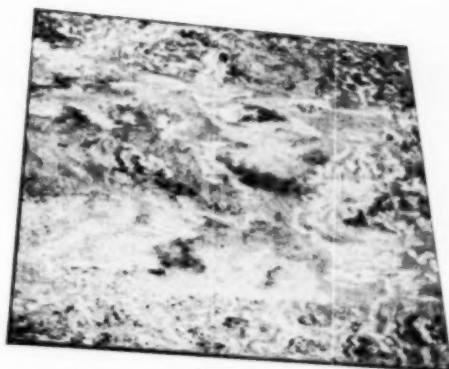
THE FLOORS in kitchens, bathrooms, and hallways are likely to get much wear and also to be tracked with water and dirt. For these reasons, they present a particular problem to homemakers, who not only want a floor covering that is durable and easy to care for, but one that is attractive and comfortable to walk on as well. In most cases, linoleums or one of the products of a similar sort turn out to be the most practical solution. All of the smooth-surfaced floor coverings have advantages in appearance as compared with bare wood floors and in cleanability as compared with rugs.

## Linoleums

Linoleums, for years, have appeared to be the most satisfactory smooth-surfaced floor covering to use. They are attractive, colorful, and easy to clean. They also wear well and are fairly comfortable to walk on.

Linoleums as made for consumers are made of oxidized linseed oil, gums, coloring matter, and wood flour, pressed or calendered while soft upon a felt base made of ground-up paper and rags saturated with asphalt to help provide resistance to moisture penetration and rot. They are available in four thicknesses: 3/16 inch (very heavy gauge), 1/8 inch (heavy gauge), standard (3/32 inch), and light gauge (slightly less than 5/64 inch). Battleship linoleums, a term which some people mistakenly apply to all plain-color linoleums, are really thick linoleums (3/16 or 1/8 inch) containing cork as well as wood flour, and having a burlap or woven cotton backing. The "standard" and "light" gauges are likely to be most suitable for use in the home, as linoleum generally does not fail by wearing through, but because of the development of a generally unsatisfactory appearance of the surface.

All linoleums were once made with cork, and with burlap backing, and these are still considered by many to be the best possible materials. One manufacturer, however, holds that the difference in wearing quality between linoleum made with wood flour and that made with cork is slight, if distinguishable. Furthermore, cork, because of its color, interferes with making certain colors of linoleum. Asphalt-saturated felt has been found to be a satisfactory backing material for lightweight floor coverings, although it does not have an especially high resistance to tearing and is readily indented or compressed. It is perhaps significant that Federal Specifications for Linoleum once again require use of burlap or woven cotton backings.



Sears Harmony House. Cat. No. 37—656 A good inlaid linoleum

although they were amended in 1943 to permit the use of other backing materials.

Genuine linoleum is available as plain (solid colors), variegated (marbleized or jasper), and inlaid. Inlaid, the most expensive kind of linoleum to produce, is made either by fitting colored pieces together in a pattern and then bonding them to the backing (straight-line inlaid) or by sifting the soft mix in different colors through stencils and pressing the pattern to the backing (molded inlaid). Molded inlaid may be embossed, a process which presses certain areas below the surface and may be used to give a masonry effect.

## Enameled Floor Coverings

Enameled floor coverings, which are often mistakenly called linoleums, are easily cared for and attractive, but they are not so durable as linoleums and not so likely to keep their good appearance in heavy traffic areas. They cost, however, about one-third to one-half as much as linoleum and may be preferred on that account and also because the housewife may like frequent change of color or pattern in her kitchen and bathroom.

Unlike linoleums, enameled floor coverings have their pattern limited to the surface, like a coat of paint on a wood floor. Thus the pattern will wear off quickly, usually leaving first an unsightly brown spot, then a black one where the asphalt-impregnated backing is exposed. For all practical purposes, an enameled floor covering may be considered to be worn out when the brown begins to show.

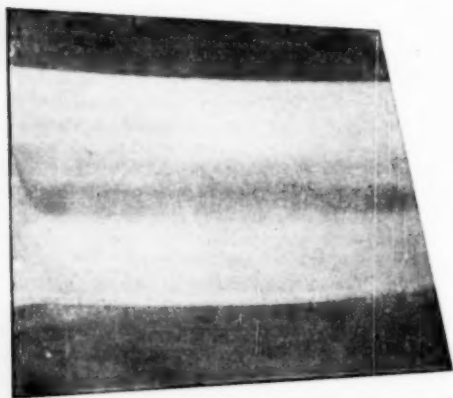


*Sears Harmony House*, Cat. No. 37-03336. Good for its type, although it failed relatively early in the test.

In the present test, the life of even the best enameled floor coverings was very short, considerably less than one-third that of the better inlaid linoleums.

### Plastics

Newcomers among the smooth-surfaced floor coverings are the plastics. These are available in very attractive colors, and when new have a smooth, satiny finish that is very pleasing. The two, *Koroseal* and *Flor-Ever*, which seem to be the most widely available now, are based on polyvinyl chloride compounds, and the manufacturers correctly claim that they will resist attack by alkali. *Koroseal* flooring, made by the Sloane-Blabon Corp. from *Koroseal* made by B. F. Goodrich Co., does not have any backing material. It is available in plain-colored and marbled.



*Koroseal*, red. A fairly good plastic floor covering. The light gray bands are the worn portions; the dark outside bands the unworn.

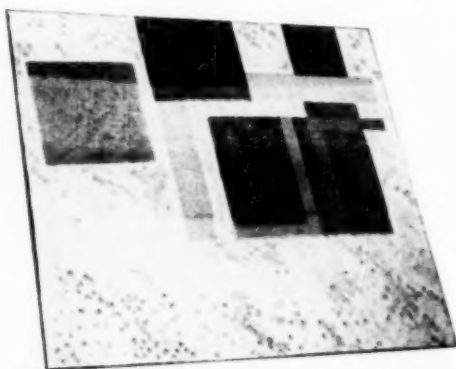


*Flor-Ever*, reddish brown. A fairly good plastic floor covering.

tiles, 6 x 6, 9 x 9, and 36 x 36 inches, or in pieces any size less than 36 x 36 inches. It costs about three times as much as good linoleum, and was the most expensive material tested, so expensive indeed that few could afford to use it for household purposes.

*Flor-Ever*, made by the Delaware Floor Products Inc., has a wearing surface of *Vinylite* and fillers, laminated to a saturated felt backing. It is much less expensive than *Koroseal*, and was only about 10 percent more expensive than the most expensive inlaid linoleums included in this study.

Both of these plastics are highly advertised as to their wear resistance and durability, and are claimed to be easy to maintain because of their non-porous surfaces. They are also said not to require waxing. This would be a great boon to the housewife if true; as a matter of fact, in CR's tests the appearance of all the plastic samples that were given a wear test was greatly improved by a wax coating. Generally, *Koroseal* plastic flooring, which did not lose much material in the wear test, did lose markedly in appearance. Its good appearance, however, was pretty well restored by the applica-



*Kolorflor*. A special type of floor covering, which proved to have very good wearing qualities in the test in comparison with enameled floor coverings.



tion of wax. The *Flor-Ever* samples were not so unsatisfactory in appearance after the wear test as the *Koroseal*, but their appearance too was much improved by waxing.

The manufacturers of both *Koroseal* and *Flor-Ever* claim that their floor coverings will return to their original condition after being dented. This was substantially true in the case of the *Koroseal* samples tested, but was not so in the case of *Flor-Ever*.

### Special Type

Still a different type of smooth-surfaced floor covering is *Kolorflor*. This, like *Flor-Ever*, is a product of Delaware Floor Products Inc. It has a wearing surface of cotton linters pressed into a sheet and colored. This sheet is then filled with a solution of alkali-resistant resins and pressed on a felt base. While not so good as linoleum, *Kolorflor* was considerably better in resistance to wear than the enameled floor coverings (see listings).

### Asphalt and Rubber Tile

Asphalt tile and rubber tile, two materials sometimes used in kitchens and other rooms subjected to hard service, were not included in the present test. Rubber tile is more expensive than linoleum and is good-looking and comfortable to stand on. Rubber is subject to damage by grease and other materials that may be spilled on it and the surface deteriorates in a rather marked fashion with time and exposure to light. It is thus more or less luxury floor covering. Asphalt tiles are inexpensive, but they are somewhat unpleasant to walk on and require an even, rigid sub-floor, such as is obtained in even-troweled concrete. Asphalt tiles on strip-wood sub-floors are likely to crack and fracture even under foot-traffic. These tiles, however, are among the few floor coverings which can be successfully installed on basement floors that have not been thoroughly waterproofed or cannot readily be waterproofed, as will often be true of basements.

### Care and Laying

Smooth-finished floorings should be laid on even, smooth floors, that are free from ridges, cracks, or projections. The sub-floor must be clean and dry. It is the manufacturer's claim that *Koroseal* will be satisfactory when installed over any type of floor or used as a floor in a new house. Linoleums and enameled floor coverings should be kept at normal room temperature for a day or so before they are unrolled and laid, to decrease the risk of their being cracked in laying.

Contrary to the belief of many housewives, linoleums and enameled floor coverings should not be given frequent and overenergetic cleanings with soap and water. Actually soap should be used sparingly, perhaps no oftener than two or three times a year. Mopping with a cloth or

mop wrung out of warm water will keep the floors in good condition, and use of a recommended water-emulsion (so-called self-polishing) wax will preserve not only their appearance but also their life, by protecting the surface from wear. As already mentioned, plastics are not supposed to require waxing, but it was found their appearance, when they were worn, was much improved when wax was applied.

### CR's Tests

CR's tests included tests for resistance to abrasion, fading, acids, alkalis, and oils, and an

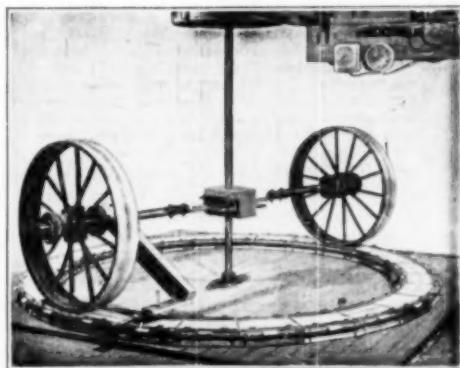


Figure 1 — Machine for Testing Abrasion Resistance of Smooth-Surfaced Floor Coverings.

This machine has two heavy wheels with close-fitting flat tires made of rubber-canvas belting. The wheels run on a circular track made of 19 short sections of wood finished to a true plane surface and of uniform size and pivoted to give even and reproducible contact with the wearing wheels. Each block of wood carried a single piece of linoleum or enameled or plastic floor covering about 5 x 9 inches in size. Various finely screened abrasive materials were tried; the material finally used was mason's sand that passed through a 100-mesh sieve. (See also Figure 2.)

indentation resistance and recovery test. The test given the most weight in rating the samples was that for abrasion resistance; the results of this part of CR's study not only indicated how well the appearance would be maintained in use, but also how much of the material was worn away from the surface. The machine for making this test was especially constructed by Consumers' Research (see Figures 1 and 2 and their legends). On this machine, the floor coverings were subjected to a combination of rolling and abrasive wear similar to that received when they would be walked on. A small but definite sliding movement similar in effect to the turning of a heel on the floor was produced because the wheel traveled over a longer arc at the outside edge of the specimen pieces than

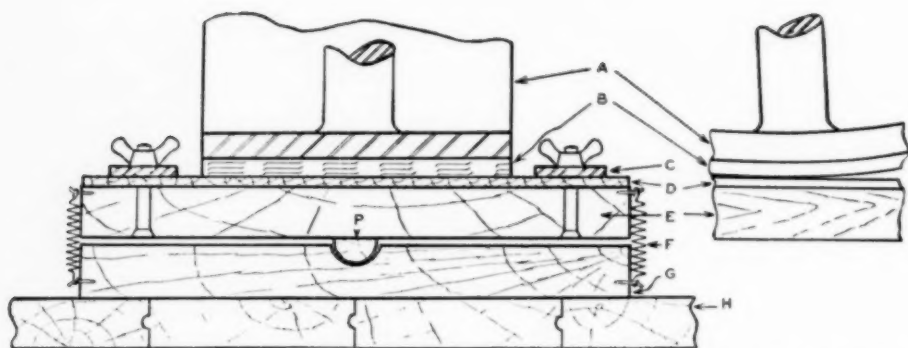


Figure 2 — Cross sectional view showing construction of one of the short elements of the test track, with linoleum in place under wearing wheel. A is a spiked wheel shown complete in Figure 1; B, wearing surface of rubber canvas belting cemented to periphery of wheel; C, steel clamping strip held down by bolts and thumbnuts; D, the linoleum or other smooth-surfaced floor covering under test; E, a track section pivoted at P to permit constant, reproducible contact of the face of the linoleum with the rubber-canvas wearing surface on wheel; F, springs (two on each side) to give stable position to E when the wearing wheel is not in contact with it. At the right is shown a partial view of the wheel linoleum, and track looking inward toward the vertical shaft shown in Figure 1 and in a direction perpendicular to the plane of the wheel.

at the inside edge. Samples were washed, but not waxed, at regular intervals. Samples chosen as typical from each group were also laid on the steps of a much-used stairway, and their appearance observed at intervals. The results of this test correlated well with the results of the wear test on the machine. Both tests showed that in choosing a linoleum for lasting good appearance, some consideration should be given to color, for reds, blues, and dark greens had a poorer appearance after wear than neutral and lighter colors.

Early in the abrasion test it was clear that some kinds of floor coverings retained their appearance better than others. All the enameled floor coverings failed early. Their appearance was considered poor as soon as the brown showed through the coating material and they were considered worn out and removed from the test at that point. Most of the *Koroseal* plastic floor coverings began to lose their good appearance early in the test because the surfaces became somewhat roughened and the brilliant colors were "grayed." Some of the linoleums and plastics went the full term of the test without losing their good appearance to a marked extent. It was not necessary to continue the test to complete the destruction of these samples because their comparative performance was fully in evidence at the termination of the test.

Acid, salad oil, strong alkali, and a liquid dishwashing detergent (*Chal*) were applied to the test samples in the tests for resistance of the floor coverings to chemical action. The dishwashing detergent harmed all of the samples tested, although the plastics and some of the linoleums were little affected compared with the enameled floor coverings.

The oil, on the other hand, did not harm the enameled floor coverings, but did affect one of the linoleums (*Sloane-Blabon*), and slightly marked the surfaces of two samples of *Koroseal*. The lemon juice did not affect any of the samples appreciably. The concentrated alkaline solution, however, as might be expected, damaged most of the enameled floor coverings by causing some kind of surface deterioration. It caused less severe surface deterioration on all the linoleums except *Sears*, *Bird* and *Nairn*. As previously noted, it did not damage the plastics.

The *Flor-Ever* plastics and the *Koroseal* plastics (except the plain blue) did not fade in the Fade-Ometer tests. All other samples tested did, but fading was so small that it was considered unimportant except as noted in the listings.

The indentation-resistance tests were made following a method similar to that used by the National Bureau of Standards. The pressure used in CR's tests, about 1300 pounds per square inch, although considerably less than the heaviest pressure used by the Bureau, was considered adequate, as it was possible to make effective comparisons between the samples tested. The *Koroseal* plastic floorings made by far the best showing in the indentation tests. Twenty-four hours after the weight was removed, all of the *Koroseals* had almost regained their original thickness and only a very slight indentation was visible. These findings agreed with the observations made in the use test, in which all the other kinds of floor coverings tested showed pits and indentations, presumably from shoe nails, while the *Koroseal* samples did not.

Inlaid linoleums were second best in the indentation test, though not so good as *Koroseal*. The *Flor-Ever* plastic floor coverings, the enameled floor coverings, and the *Kolorflor* sample made the poorest showings; the indentation remaining after twenty-four hours on these samples averaged .003 inch deeper than the average of the inlaid linoleum samples (.005 inch).

Prices are per square yard. Linoleums and plastic floor coverings were considered as a single class for the purposes of rating and were rated according to higher standards than the less expensive and less durable enameled floor coverings and *Kolorflor*. Ratings are cr49.

### Inlaid and Marbleized Linoleums

#### A. Recommended

*Armstrong, Safety-Back, Light Gauge* (Armstrong Cork Co., Lancaster, Pa.) \$1.49, marbleized; \$1.69, patterned. Appearance after wear test, very good. Resistance to wear, good. 1

*Armstrong, Armofelt* (Armstrong Cork Co.) \$2. Green tiled pattern, embossed. Appearance after wear test, good. Resistance to wear, about average. 2

*Sears Harmony House* (Sears-Roebuck's Cat. No. 37-656; made by Nairn) \$1.79, plus freight. Cream lightly marbleized with red and black. Appearance after wear test, excellent. Resistance to wear, about average. 2

*Bird* (Bird & Son, Inc., East Walpole, Mass.) \$2.39. Predominantly tan, gray, orange, red, and blue marbleized pattern. Appearance after wear test, very good. Resistance to wear, about average. 3

#### B. Intermediate

*Armstrong, Safety-Back, Marbelle* (Armstrong Cork Co.) \$2. Dark red marbleized pattern. Appearance after wear test, poor. Waxing, however, corrected in a large measure the deteriorated surface of worn part of the sample as compared with the unworn part. Resistance to wear, below average. 2

*Nairn* (Congoleum-Nairn Inc., Kearny, N. J.) \$2. Tan marbleized. Appearance after wear test, very good. Resistance to wear, below average. 2

*Sloane-Blabon*, No. 354 Tan, No. 465 Blue (Sloane-Blabon Corp., New York 16) \$2.25. Brown and blue marbleized patterns. Appearance after wear test: brown, good; blue, fair. Resistance to wear, about average. 3

### Plastic Floor Coverings

#### B. Intermediate

*Flor-Ever* (Delaware Floor Products, Inc., Wilmington, Del.) \$2.59. Two samples tested: one sample, reddish brown marbleized; the other, green marbleized. Appearance after wear test, of one sample, very good; of the second sample, fair. Resistance to wear, good. 1

*Koroseal* (Sloane-Blabon Corp., New York 16) \$6.53. Six samples tested: Toreador (red), Caramel, Midnight (blue), and Marbletones (Crushed Raspberry, Buckskin Taupe, and Garnet). Appearance after wear test, generally poor unless waxed (see illustration). Waxing corrected in a large measure the deteriorated surface appearance of the worn portions of the sample as compared with the unworn parts. Resistance to wear, good, but appeared to scratch more readily than inlaid linoleums. Some fading on Midnight (blue) sample only. 3

### Enameled Floor Coverings

#### A. Recommended

*Sears Harmony House* (Sears-Roebuck's Cat. No. 37-03336) 71c, plus postage or freight. Gray, red, and black pattern on ivory background. Resistance to wear, above average for this class of product. Some fading. 1

*Gold Seal* (Congoleum-Nairn Inc., Kearny, N. J.) 79c. Predominantly red, blue, and gray mottled on cream background. Resistance to wear, above average for enameled floor coverings. Some fading. 2

*Sloane-Blabon*, No. 5116 (Sloane-Blabon Corp., New York 16) 79c. Predominantly tan, blue, yellow, green and maroon pattern on ivory background. In resistance to wear, best of all enameled floor coverings tested. Some fading. 2

#### B. Intermediate

*Armstrong Quaker* (Armstrong Cork Co., Lancaster, Pa.) 79c. Cream and brown mottled background with green and red pattern. Resistance to wear, below average. 2

*Sloane-Blabon*, No. 5207 (Sloane-Blabon Corp.) 79c. Blue marbleized. Resistance to wear, below average. 2

*Bird Armolite* (Bird & Son, Inc., East Walpole, Mass.) 89c. Gray leaf pattern on red background. Resistance to wear, below average. 3

#### C. Not Recommended

*Duralin* (Delaware Floor Products, Inc., Wilmington, Del.) 89c. Imitation tile pattern on ivory background. Resistance to wear, considerably below average. Some fading. 3

*Duralin* (Delaware Floor Products, Inc.) 89c. Black and red pattern on ivory and gray background. In resistance to wear, poorest of all enameled floor covering samples tested, having about one-third the durability of *Sloane-Blabon*, No. 5116. 3

### Special Type Floor Covering

#### A. Recommended

*Kolorflor* (Delaware Floor Products, Inc., Wilmington, Del.) \$1.39. Black, red, and gray pattern on cream and gray mottled background. Resistance to wear, very good (almost three times as good as the best enameled floor covering tested.) 1

# Dictating Machines

**M**ACHINES for recording dictation, particularly those which use wax cylinders, have been known and used for many years. More recently there has been some development of recording machines that use plastic disks for recording and others that put the voice record on wire or tape.

## **Dictating Machines Recording on Wax Cylinders**

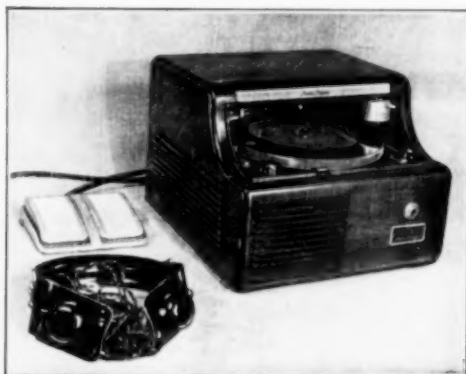
Two well-known products in this class are *Ediphone* and *Dictaphone*. Both represent a modern office version of the old wax-cylinder phonograph. The dictation is recorded on a wax cylinder, which has the drawback that it is breakable and that the record becomes indistinct if it is played back more than a few times, as may be necessary occasionally in order for the typist to hear a doubtful part of the recording.

Wax-cylinder-type instruments require use of three machines: (1) the dictating machine, (2) the transcriber used by the typist, and (3) the shaver, which removes the surface of the wax cylinder; the cylinder can be re-used about 40 times by shaving down the surface

after each use. Each of the three pieces of equipment is fairly expensive, so that the total cost amounts to \$600-\$700.

The *Ediphone*, sold by Thomas A. Edison, Inc., records acoustically rather than by electronic means, and has no volume or speed adjustment. A paper strip is used as an accessory device for marking the length of the letter. The person dictating can turn back and listen to his own voice and mark the paper strip where he wishes to make a correction. The stenographer listens to the corrections, then starts in on the letter itself. The transcriber can be stopped by the typist, but the machine does not stop instantly and may require backspacing to pick up any words lost. The transcriber for the *Ediphone* has both volume and speed control, and it is priced about the same as the dictating machine itself. The voice reproduction is reasonably intelligible although the tone is not a natural one and sibilants are often difficult to hear, which means that mistakes may be made in transcribing.

The wax cylinders, which take 1000 to 1200 words, or around 10 minutes' dictation, are the same for all forms of Edison dictators. The cost of the cylinder is 75 cents, but this is a minor matter in view of the numerous times each cylinder can be used. One disadvantage of this type of machine is that the process of shaving the cylinder wipes out the original recording so no voice record is kept; if the record is kept, the space required for storage is



*SoundScriber*, complete in two units. Portable recorder with hand microphone at the left. Disk transcriber with headphones and foot controls at the right.

large, too large to be practicable in many cases. The shaver, through which the cylinder is put twice to clean off the recording, is a fairly complicated instrument, costing well over \$100.

Different forms of this dictating machine are available; one kind sits on a desk and another is semi-enclosed, on a movable pedestal. Rebuilt dictators sell at about a hundred dollars less than new ones.

Edison also makes an electronic instrument (*Edison Electronic Voicewriter*) using radio tubes for amplification and providing a volume control on the dictating machine. This, which also uses wax cylinders, gives much more natural and clear reproduction of the voice. Again, several forms of the dictator are available, one to be used on the desk, one in a semi-enclosed pedestal, and a third in a fully enclosed pedestal. The pedestal type is priced at \$10 to \$15 higher than the desk type. With the *Voicewriter* it is possible to secure an attachment to record telephone conversations. By stepping up the sensitivity of the instrument, the user may record an interview involving three or four people.

Additional equipment to record a two-way telephone conversation costs about \$100 more. With the *Ediphone* a hand microphone is used; with the *Voicewriter* either a hand or desk microphone is available. The typist listens to the recording by means of one of two types of earphones. While provision is made for mailing the cylinders, they are large and awkward to handle.

The *Ediphone* and *Voicewriter* are fairly satisfactory for recording short letters, but many people find them difficult to work with when dictating long letters or long records where several corrections may need to be made. The machines, however, would have the advantage of being sturdy and of requiring comparatively little maintenance over a period of years.

The *Dictaphone* is strictly competitive with the *Edison Electronic Voicewriter*. The Dictaphone Company has discontinued making its acoustic models, but some rebuilt models may still be available. The dictator, the transcriber, and the cylinder shaver are based on the same principles as in the *Voicewriter* and the prices for the same type of equipment run very close together in the two makes. The minimum cost for an electronic model plus the necessary pieces of associated equipment is about \$700.

## Recording Machines Using Disks or Belts

An entirely new type of electrical dictating machine appeared about 1940, called the *SoundScriber*. This records electronically on a flexible plastic disk which is non-breakable, easily handled, and requires very small filing space. The dictating machine provides a volume control and means for playing back the record. A signal shows when the voice is being recorded, and either a hand or desk microphone may be used. An attachment is available for recording telephone conversations, and it is also possible to record a conversation carried on among several people by increasing the sensitivity, as with the *Edison Electronic Voicewriter*.

The *SoundScriber* is competitively priced with corresponding dictating machines using wax cylinders, and only two machines are necessary<sup>1</sup>, namely a dictator and a transcriber. There is a portable type also available for traveling businessmen, as a convenient means of making immediate records of agreements, conferences, telephone messages, etc.

Ordinarily the typist uses a "soft-speaker" which stands on her desk, or is attached to a floor stand, but ear fittings or head fittings are available. The "soft-speaker" has the advantage that it can be placed close to the ear of the typist and yet does not cut off the hearing of other sounds. The tone from the speaker is soft and clear, so that it does not need to carry far; and hence will scarcely be noticed by others in the office. The volume control is more successful than it is with the cylinder machines, and it is possible to adjust it to any desired level. The transcriber is preferably not used on the same desk as the typewriter; if it is, the instrument must be carefully leveled. The transcriber can be stopped at any point by the typist. It stops quickly, with no loss of words, and if the typist should wish to have the machine repeat the last sentence or so it is only necessary to press a pedal on the foot control. The total price of the equipment is around \$600.

The plastic disks are sold in three sizes: 7-inch in diameter, which takes 30 minutes of dictation; 5-inch, which takes 15 minutes; and 3-inch, which takes 4 minutes. The 7-inch

<sup>1</sup>A third machine, *SoundEraser*, is available to large users on a 15- or 30-day lease basis. This machine, it is claimed, will erase the dictation from the disk as many as 25 times or more, reducing cost of using disks by 75 percent. Small users can accumulate their disks and have them erased at *SoundScriber* sales agencies at a nominal charge.



disk records about 3500 words. The disks can be filed if desired or can be sent out in mailing envelopes with no danger of damage. The cost of keeping the machine supplied with disks is a small item (see footnote 1, page 11). The person dictating either records the length of letters on a separate "log" sheet by watching a moving marker on a lighted index; or by use of a newer device the person dictating leaves a clear space on the record at the end of each letter. The typist then prepares a "log" from the record which shows the length of each letter and the corrections. This is a great convenience and timesaver for the person dictating, in comparison with the older method.

The *SoundScriber* is much easier to use and to manipulate than the cylinder-type machine. The recording can be played back many times without being adversely affected. The equipment is reasonably sturdy in use.

Dictaphone now has a similar machine known as the *Time-Master*, tests on which have not as yet been completed by CR, which sells at \$716 complete (two units, dictator and transcriber). The main difference between the *SoundScriber* and the *Time-Master* is that with the latter an endless plastic belt is used instead of a disk. The belts cost 6½ cents each, and are not reusable, but like the plastic disks can be mailed in an envelope. (Durability of the belts with storage and handling is not yet established.) Each belt is sufficient for 15 minutes of recording.

Edison also has announced a disk-type machine known as the *Disc Edison Voicewriter*. Information was not available on which to rate the *Disc Voicewriter* at the time this BULLETIN was sent to press.

### Wire and Tape Recording Devices

Although wire and tape recorders do not ordinarily give high fidelity in the sense it is used in connection with musical reproduction, their fidelity is good compared with other recording devices for commercial purposes. They are relatively inexpensive for making recordings, but are not well suited to office purposes; for one reason, because the recording is played back by means of a loud-speaker similar to any radio loud-speaker. Wire recorders work well for large operations as, for example, in recording speeches at large meetings or conferences where it is desired to have a full record of everything said. The fine stainless-steel wire

or the narrow tape with a coating of magnetic material which is used in these machines lasts indefinitely, making it possible to play a recording repeatedly without loss of fidelity or quality. A recording that is no longer needed can be "erased" and the wire and tape used for a completely new recording. Tape can be cut at any point, a section removed, and the two ends fastened together with the aid of a bit of cellulose tape. Complete instruments of the wire or tape recording type can be gotten at prices as low as \$105. Machines of either kind can be used for office purposes if the typist is isolated from other workers so that the noise of the loud-speaker will not disturb others. The record would necessarily be erased for reuse, as the cost of wire and tape would preclude filing of any except important records.

Following are tentative ratings based on clarity of sound and convenience in use. The prices include 6 percent excise tax.

#### A. Recommended

*SoundScriber* (The SoundScriber Corp., New Haven 4, Conn.) Dictator with hand microphone and volume control, \$330. Telephone recorder attachment, \$77. Portable type in case with handle, \$350. Transcriber with earphones, \$268; with "soft speaker," \$286. Very clear reproduction. Price of disks per 100: 7 in., \$11; 5 in., \$6.75; 3 in., \$1.50.

#### B. Intermediate

*Dictaphone*, Model AE (Dictaphone Corp.) Electronic type. Desk model with volume control, \$334 to \$350; in junior cabinet, \$345 to \$360; in large cabinet, \$398 to \$413. Transcriber, *Cameo* model, with volume and speed control, \$273. Model BE electronic transcriber with volume, speed, and tone control, \$334. Wax cylinders, 59c. Standard *Dictaphone* shaver, \$143. *Cameo Dictaphone* shaver with automatic controls, \$186.

*Ediphone* (Thomas A. Edison, Inc., West Orange, N.J.) Desk model, new, \$265; rebuilt, about \$150; semi-enclosed pedestal model, \$276. Transcriber for all Edison dictators, with volume and speed control, \$276. *Edison Mercury* shaver, \$143. *Ediphone Master* shaver with automatic controls, \$186. Edison wax cylinder, 75c. Acoustic type giving only fair reproduction.

*Electronic Voicewriter* (Thomas A. Edison, Inc.) Dictator for desk use with volume control, \$350; semi-enclosed pedestal model, \$360; fully enclosed pedestal model, \$366; with attachment to record telephone conversation, \$469. Uses same transcriber, cylinders, and shaver as *Ediphone*. Voice reproduction natural and clear; much easier to understand than the *Ediphone*.



### C. Not Recommended

The following wire recorders are listed *C. Not Recommended* for the purpose discussed in the article. The use of a loud-speaker for reproduction tends to render them unsuitable for general office use.

*Soundmirror* (The Brush Development Co., Cleveland) Table-type recorder, \$375. Magnetic steel ribbon, half-hour reel, \$2.50. The Brush Development Co. also have available a professional model of the *Mail-A-Voice*

dictation machine listing at \$371. No tests were made on this unit.

*Webster, Wire Recorder, Model 80* (Montgomery Ward & Co., N.Y.C.) Portable recorder with loud-speaker in case with handle, \$150. Steel recording wire: 15-minute spool, \$2; half-hour spool, \$3; one-hour spool, \$5 (somewhat cheaper if purchased in lots of 10).

*Wireway* (Wire Recording Corp. of America, Brooklyn 27, N.Y.) Portable recorder in case with handle, \$150. Telephone pick-up, \$10. Prices of wire are the same as for *Webster, Model 80*.

## How Driving Habits Affect Gasoline Consumption

A RECENT SURVEY conducted by the Packard Motor Car Company covering more than 1000 owners of new *Packard 8* cars disclosed that miles per gallon of gasoline obtained by the most popular model with 130 horsepower engine and overdrive varied from less than 15 m.p.g. to 22 m.p.g. This wide variance was attributed to differences in individual driving habits, traffic conditions, terrain, and temperature, with individual driving habits causing more variation in mileage obtained than any other factor. A summary of the results is given in the following table.

Miles per gallon	Percentage of owners	
22 or more	5.1	Consistently steady drivers, traveling at moderate speeds mostly on level roads and in light traffic and accelerating gradually.
21	7.1	
20	18.5	
19	13.6	
18	24	
17	15.8	Drivers favoring high speed and rapid acceleration, and driving mostly in heavy traffic.
16	9.6	
15 or less	5.9	

To check these findings Packard ran a controlled test of two similar cars on a proving ground. Both cars averaged 19 m.p.g.

when driven at a steady speed with no stops, and without quick accelerations. (The driving speed was not stated, but it is perhaps safe to assume it was the most efficient speed from the standpoint of gasoline economy, probably around 30 miles per hour.) However, when one car was driven at a steady speed and the other stopped every half mile for 10 seconds, then accelerated at high speed to catch up with the first car, it was found that the car driven at constant speed continued to give 19 m.p.g., while the second car, which completed the course in the same over-all time, gave an average miles per gallon of approximately half as much, or about 9 m.p.g. Under such conditions, the car operated at steady speed would be in overdrive for the entire run, but the other car would be operating a part of the run in first, second, and third gear; the effect in the second case would naturally be to reduce gasoline mileage appreciably.

It is clear that conservative driving pays big dividends in over-all cost per mile. The steady driver traveling at moderate speeds may expect his outlay for gasoline to be 1/3 (or about \$50 per year on the basis of 10,000 miles per year) less in some instances than the fuel cost of the driver who favors high speed and rapid acceleration. This will be evident from the table in column 1. There will, of course, be substantial additional savings from greatly decreased wear of tires, and lessened wear of engine and running gear, and decreased maintenance and repair costs.

# Two TV Receivers

**I**T is reasonable to expect that the very rapid changes which are taking place at the present time in the design and construction of television receivers will not prove to be of a final or conclusive sort. The art of television receiver design is advancing at such a rapid rate that few will doubt that important additional changes will be made in the near future. Such questions as users' preference as to size of viewing screen, increased ability to pick up transmitting stations at a distance, decreased tendency to drift off the station being received, and better tuning indicator devices are matters that will be dealt with in new ways as time goes on. Greatly improved audio response characteristics are surely to be expected in the near future on all the better makes of receivers. It is reasonable also to look forward to increased picture stability, a considerable reduction in the number of tubes necessary for good operation, and improvement in the ability of receivers to ward off "man-made noise" effects such as interference from car, truck, and plane ignition systems.

For these and other reasons, CR has advised against plunging too heavily in buying TV receivers, and continues to suggest that the purchase of one of the more costly TV sets at the present time may well turn out to be a poor investment to all except those persons to whom the loss of a large expenditure is unimportant. (Turn-in or resale values are likely to be very poor in the future, as they are now.)

The *Pilot Candid* TV receiver reported in the listings made use of a comparatively small 3-inch viewing tube. A receiver with such 3- or 5-inch screen may have its place in the home as a "second set," but present indications in the trade point to the use of even larger rather than smaller screens than afforded by the present popular 10-inch viewing tubes. In fact, the very latest receivers are featuring a viewing tube with a 16-inch diameter viewing screen, and the tube is constructed in part of metal, thus somewhat reducing its cost of production.

At the present time, the television screen has about 525 scanning lines, and for this reason the "screen" appears rather coarse when compared with a half-tone reproduction; it is, of course, enormously coarser than the

grain of the emulsion in a photograph. Thus in order that the picture shall have a pleasing quality, it is necessary that one shall sit far enough away from the television image that the scanning lines are not visible. Enlargement of the television image by use of a magnifying lens in effect requires that one must view it at a still greater distance, and there is not, consequently, any visual advantage in the use of the lens, for the effective size and details of the picture remain the same, whether it is viewed at a given distance directly or at a greater distance with a magnifier. A lens, in addition, has the disadvantage that it tends to limit the area in front of the set within which an acceptable picture may be seen, and must, of course, interfere to some extent with the clarity of the picture.

In the listings which follow, the receivers have been judged and rated principally upon the results of instrumental measurements and "in-use" tests by comparison with other receivers. (It is not yet possible to judge TV receivers comparatively by instrumental methods in the exhaustive way that has been possible for a decade or more with radio receivers.) Size of viewing screen was not considered as a factor in making a judgment of quality or performance, as it is felt that the particular choice of size of viewing tube must necessarily be left to the individual purchaser, who will determine the question in the light of his needs, and the size of his family or group of friends, space available for the set, and above all perhaps, the size of his purse. It should be noted however, that the comfortable viewing distance using a very small screen, one of 3-inch diameter for instance, is quite short, and it is to be doubted if more than one or two persons would be able to watch such a small screen comfortably at the same time.

## A. Recommended

*Pilot Candid* TV Receiver, Model TV-37 (Pilot Radio Corp., Long Island City, N.Y.) \$99.50. For operation on 105-120 volts, 60 cycles a.c. Power consumption, 110 watts. 21 tubes used including 3-in. picture tube; also one germanium rectifier. Separate coverage with continuous tuning of lower (54-88 megacycles) and upper (174-216 mc.) TV bands. Placement of controls was well chosen. Picture quality, excellent, although size of

tube, as has been noted in the text, puts the set at a serious disadvantage in many uses (normal viewing distance, about 1 ft.). Video response down 6 db. at 3.8 mc., very good. Brilliance of picture was about minimum usable (a common failing in small sets); for good contrast, room must be well darkened or the tube shaded from strong light (an undesirable arrangement from the standpoint of the observer's eyesight). As to sensitivity and low noise level, set was very well designed, and was judged to be equal to or better than best receivers so far tested. For this reason, the set will provide reception with an indoor or low-cost antenna in many locations in which less sensitive receivers will not operate satisfactorily. Audio quality, unsatisfactory ("tinny")—comparable to output of midget table-model radio. Distortion, 12% at rated output of 0.3 watt. Audio hum level considered rather high. Continuous tuning dial with switch for lower- and upper-band coverage. Because receiver used intercarrier type of circuit, sound volume was not at maximum when picture quality was best (though sound quality was at optimum point). Dial arrangement, good. Shock hazard was minimized due to proper insulation of controls, binding posts, and semi-fixed adjustments on rear. As a "second set," or where minimum purchase price is essential, the *Pilot Candid* is considered a very good buy. 1

*Dumont Chatham Teleset*, Model RA-103 (Allen B. Dumont Laboratories, Passaic, N. J.) \$445. Installation cost, are extra. The set input impedance was 73 ohms and for best results required antenna equipment furnished by manufacturer. Power consumption,

290 watts. 27 tubes used including 12-in. picture tube. Picture size,  $7\frac{1}{2}$  x 10 in. Set was tunable continuously from 44 to 216 megacycles and thus covered all 12 TV bands and the standard (88-108 mc.) FM transmission band. The picture tube may be switched off during FM reception (advantageous). Picture quality considered excellent; video response down 2 db. at 4.25 megacycles, excellent. Placement of controls was well chosen. Stability of synchronizing circuits, highly satisfactory. Video sensitivity, or what might be considered a measure of the ability of the receiver to pick up a weak television signal and present it satisfactorily, considered excellent. The audio response was down 10 db. at 5500 cycles, and the resultant audio quality was poor, not better than that afforded by a good table-model radio. (Audio distortion was 6% at rated 3 watts output, which is good for present TV receivers.) Tuning drift was high, an undesirable quality. Electrical leakage (a measure of the shock hazard present), negligible if set is correctly installed by qualified and experienced servicemen with shield of lead-in cable solidly and permanently connected to ground. (User is warned, however, that if the antenna lead-in cable — or the ground wire — is detached, an excessive leakage current may flow.) It is felt that the general engineering compromise arrived at in the design of this receiver places it in the *A-Recommended* class (ratings are, of course, relative to other equipment available). The shortcomings mentioned with regard to drift and audio quality were present on all other TV receivers previously reported and will likely not be overcome until set designers have progressed somewhat further than they have up to this time. 3

## Tire Chain Applier

EVERYONE who experiences difficulty in putting tire chains on a car is likely to be interested in a simple device known as *Weed Zip-On No. 929 Tire Chain Applier* (American Chain & Cable Co., Inc.), obtainable at auto supply stores at 40 cents a pair. This is typical of a number of similar gadgets now offered at \$1 per pair by Frank Earnest Co., 233 West St., Williamsport, Pa.; Stoddard Products Co., Inc., Westville Sta., New Haven, Conn.; and others to simplify a tedious and difficult chore that may sometimes involve hazards to the motorist if a jack should slip, or the car fall off the jack during the job of attaching chains. The appliers consist of a pair of heavy U-shapes made of 3/16 in. steel wire, whose free ends are bent in the form of loops with protruding ends. The links at one end of the tire chain, the end not having the fasteners, or catches, are placed on the protruding ends, and the gadget is pushed over the tire at a point about 12 inches from the ground, where it is held on by friction. The rest of the chain is laid out on the ground behind the car. With the front wheels pointing straight ahead, the

car is driven forward for one complete revolution of the wheels; this operation leaves the chain draped over the tire. (Some time and effort can be saved if another person directs the driver when to stop the car so that the car is moved forward through just the right distance.) The device is then removed, permitting the end of the chain that was fastened to the device to fall free for fastening to the fasteners or catches at the other end of the tire chain.



*Weed Zip-On No. 929 Tire Chain Applier*

### ***Better Not Buy a Record-Player Now***

**I**T IS CR's opinion that most consumers will be well advised not to purchase any costly new record-playing equipment at the present time; the matter is one that would need to be considered carefully, indeed, in planning the purchase of any radio-phonograph combination incorporating such equipment. There are several reasons for this view. RCA is shortly to put on the market a record-playing system competitive with Columbia's LP but using an entirely different turntable speed (45 revolutions per minute), a stylus said to have a slightly smaller tip radius than that used with the LP's, and records with a large center hole ( $1\frac{1}{2}$  inch) and smaller outside diameter ( $6\frac{7}{8}$  inch) than any of the records heretofore used by the consumer. Existing equipment of both standard and LP kinds will be incapable of playing RCA Victor's records. RCA's action in choosing still a third and hitherto unused rotational speed for records puts the consumer at a great disadvantage and will make necessary the purchase of additional equipment, with no guarantee that by fall a still different system will not be marketed and require him to use, if he wishes to have the benefit of certain records, still a fourth turntable, pickup, and stylus (and changer, if one is desired) — possibly even a tape recording and playback system. Victor and Columbia have imposing lists of artists; if one demands certain selections because of the particular persons performing them or for other qualities of importance, then he *must* have the necessary equipment to play them.

It is worthy of mention, however, that many believe the final outcome of the "battle" will ultimately benefit the consumer, as it is apparently necessary to break away from the influence of old pre-electric recording techniques before any great improvement in recording can be made.

Another reason for delaying purchase even if one feels a choice must be made soon is the fact that the equipment available to the average consumer for playing LP records is at best of only mediocre quality. As has been stated previously, quality of turntable and pickup is vitally important if the user is to

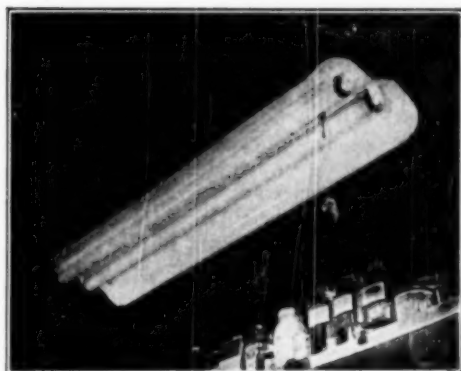
obtain full realization of the potentialities of these records, and CR's tests to date indicate that turntables and pickups of top quality and reasonably priced are not available for playing the new records. As an example, it is indicated that the osmium-tipped needle being used in the *Philco* LP attachment will be good for about 60 sides. Columbia, however, have recently announced a sapphire needle usable in either their own or the *Philco* player. It appears that the prospective purchaser of any equipment that includes provision for playing "microgroove" records would do well to await the availability of better equipment with reasonably long service life, and a definite indication that Columbia's LP system of reproduction is "here to stay"; above all that playing equipment (pickup and turntable) of suitable quality is available — at a reasonable price, and well standardized. Good playing equipment is pretty sure to come; General Electric now have available a magnetic cartridge with sapphire stylus especially designed for use with the LP records, and this is a step in the right direction if its characteristic is suited to the LP records and its quality comparable to that of GE's cartridge as made for use with standard 78 rpm. records.

We have reason to believe that extensive development work is being done at the present time toward improving record changers. The very light stylus pressure used on the newest records does not make for sure and convenient handling of the pickup by hand; it increases the possibility of inadvertent scratching of the record. It may well be that a good changer or a single-record player with a mechanical device to lower the pickup will be a necessity for playing records used with any pickup that has a very light pressure in the record groove.

The problem is a serious one for owners of expensive commercially manufactured console radio-phonograph equipment, for the change-over of one of these to new pickups, arms, and changers can be prohibitively expensive, or even impracticable. The owner of a unit system with separate turntable, amplifier, and speaker is in a better situation, for changes in record-playing equipment can at worst render only a portion of *his* equipment obsolete. Even such a high-fidelity enthusiast, however, should go slow in buying new record equipment, preferably await the expected advent of better record players than now offered; improved units are known to be under development.



# *Extreme Poisoning Hazard in Breakage of Fluorescent Lamps*



**I**NFORMATION has recently come to the attention of power company employees and of technical men in industry regarding a rather alarming hazard that has been found to exist in the handling of fluorescent lamps. There is a possibility of very serious injury by glass from a broken tube of a fluorescent lamp, if there is a cut from the glass, or if the powdered material (phosphor) from the surface of the glass enters a wound or cut. If a person is cut by a piece of glass from a fluorescent lamp, or if the material on the glass enters a wound or cut, chronic inflammation may result and months may be required for the wound to heal. There have been a number of instances in which the surgeon's knife had to be used, in such cases, perhaps several times, to remove dead or degenerated tissues and tumor masses from the region where the cut occurred. Indeed in some cases, removal of large areas of skin, muscle, or bone may be required.

This extreme toxicity is in the powder which is used to line the interior of the lamp, commonly containing a small percentage of a compound of the metal beryllium, which has recently been found to be a very poisonous substance indeed. The coating is used to give off visible, useful light when it is struck by ultraviolet rays created when the electric current feeding the lamp energizes the gas in the tube.

Four cases of injury from fluorescent lamp material have been reported by one physician. In September 1947, a woman was cut on the left wrist when an overhead fluorescent tube dropped from its socket and broke. The wound did not heal until May 1948, and then only after surgery. (The process of healing would

begin and then the cut would "break down.") In three other cases there were similar wounds, and tumors occurred which resembled tumors found in the lungs of fluorescent lamp workers who had breathed fluorescent lamp powder. (The cause of their death was chronic pulmonary granulomatosis.)

Lamp makers have begun experiments with synthetic non-metallic powders to replace beryllium, but in the meantime it is extremely important that the lamp user shall exercise every caution in disposing of fluorescent lamp tubes, and above all to dispose of them in such a way *that they cannot come into the hands of children*, who in playing with the discarded lamps are almost certain to be subjected to the dangers referred to. Dust or fumes from the materials in the lamp must be prevented by all possible means from getting into the human system either through a wound or through the nose or mouth; it would be almost impossible to prevent such entry in the case of a child playing with a lamp tube or with broken pieces of one.

The danger described is so great that power companies and lighting engineers have contrived a special machine for breaking up the tubes, which encloses the lamp tubes within a strong metal case and breaks them *under water* under carefully controlled conditions. The personnel engaged in the task are protected with gloves, goggles, face masks, and other suitable means. (The first measure for safe handling in breaking the tubes is to get the material of the lamp wet, and keep it covered with water in the disposal receptacle. There is no advice to consumers that can be given at this time in brief space regarding a safe and

convenient way of breaking lamp tubes under home conditions.)

Besides the beryllium powder in the lamp, there is another source of toxic material — the mercury — and when the lamp is broken, mercury vapor, which is poisonous (with long exposure) even in incredibly dilute quantities in the air, is released; besides, metallic mercury may become deposited in cracks of the floor, table, sink, or other household equipment, to give up its toxic vapors for a period of perhaps months or years. The mercury hazard may be serious, but the beryllium danger is very much more serious and immediate and is accordingly emphasized in this discussion.

\* \* \*

In addition to the special precautions which have been noted, let us sum up with the following specific advice:

Never discard fluorescent lamps by placing them with rubbish or refuse where they can be carelessly handled or broken.

Never destroy them in incinerators.

Do not permit them to be disposed of where children may have access to them or can play with them.

If there are fluorescent lamps in your home, warn everyone in or about the home who may come into contact with the lamps about the great danger in case a tube gets broken. Tell them particularly about the extreme precautions that would be necessary if a lamp does

fall on the floor and breaks, and explain that by no means should anyone attempt to *pick up bits of glass or other material from the lamps with the fingers*. (The first thing to do if a lamp falls and breaks is to get out of the room and stay out until any dust produced shall have settled.)

One large company's safety bulletin mentions that the glass is very fine and penetrating and often flies with a good deal of force when a tube is broken. (In rare cases, lamp tubes explode spontaneously and scatter bits of glass and phosphor material widely in the room.) The advice is also given that "anyone who should happen to break a fluorescent bulb should receive medical attention immediately to make sure that he has received no cuts with this beryllium-contaminated glass." Since many physicians may not know of the danger as yet, it will be helpful to your physician, should an accident occur with a fluorescent lamp tube, if you will ask him to read the material in this BULLETIN.

Users of large numbers of fluorescent lamps should take pains to warn janitors and garbage and refuse handlers about the danger discussed, for it is certain that almost all persons who handle such lamps have been wholly unaware that there is a very serious hazard involved in connection with a broken tube or particles of glass or powder from such a tube.

---

## ***Paint Quality Not So Good— Contrary to Paint Trade Claims***

**I**n a published interview, the president of the National Paint, Varnish, and Lacquer Assoc. was quoted as stating that, after more than three years' exposure on a test fence, "conservation" paints appeared to be equal in integrity to old-type (pre-war) paints. "Conservation" paints are paints in which the oil content is restricted and contains 3¾ lb. of bodied oil plus 1¼ lb. of thinner, instead of 5 lb. of raw linseed oil. The National Paint, Varnish, and Lacquer Association's official, however, neg-

lected to point out that in painting the test panels with the "conservation" or oil-restricted paints, a larger volume of paint had been used in order to obtain at least as great a dry-film thickness as was provided by the pre-war oil-rich paints. From the consumers' point of view, it is of considerable importance that 5 gallons of oil-restricted paint are required to do the job which was done by 4 gallons of paint of pre-war quality; this, however, would be a minor consideration to a man whose concern was chiefly in

the manufacture and selling of paint. The statement by the Paint, Varnish, and Lacquer Association clearly indicated that paints had gone up less in price than other commodities; the facts, however, are that paint went up in price *more* than the average for all commodities by quite a wide margin, and the consumer was *not* at the time in question "getting more dollar value" in paint than in other commodities, as was alleged by the Association's spokesman

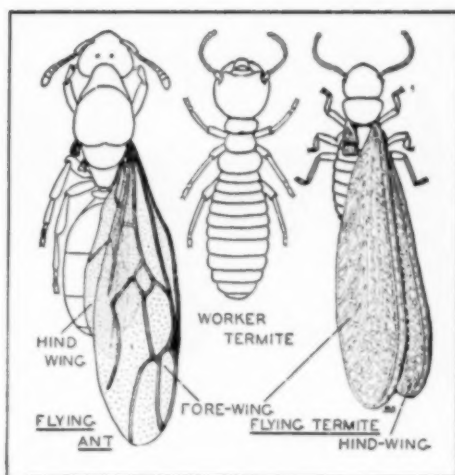


# The Termite Problem

**A**FTER warm rains in spring and fall, you may see swarms of insects flying about your house or congregating at the windows in an attempt to escape to the out-of-doors. If you kill some of these with a good fly spray and examine them, you can determine what they are. If the fore wings are larger than the hind wings, with few but conspicuous veins, and if the abdomen is attached to the rest of the body by a narrow waist or stem, you are looking at a flying ant—not a termite. If the fore and hind wings are about equal in length with a network of fine, inconspicuous veins, and if the abdomen is *broadly* joined to the rest of the body, you are looking at a termite. If they are termites, scrutiny of the timbers of your house is in order.

Termites, once an appreciated high-protein food for primitive man, are now looked upon by man only as pests of a troublesome and dangerous sort. There are two major groups of termites in the United States, the subterranean (*Reticulitermes*) and the dry-wood (*Kaloterms*). The subterranean termite is general in its distribution while the dry-wood termite has been found in coastal and southern border states from Cape Henry, Virginia, to northern California. Thus some parts of the United States have both kinds. On a world-wide basis, about 95 percent of termite damage is due to subterranean species, and 5 percent to dry-wood termites. It is their differences in nesting habits and the relationship between nesting habits and structural wood damage that are of importance to the householder.

*Subterranean termites* can live only in moist soil. They cannot survive drought nor flooding. They make tunnels to their food, which may be a fallen tree in the forest or the wood in your house which is near to or directly on the earth. They work from within the wood, following the grain, and they cause no external evidence of timber weakness. *Dry-wood termites* will fly to and attack wood directly in any part of a building. They have no base of operations from which the workers make forays in search of food, but nest in the wood which they are at the same time devouring. Their entrance holes are about the size of BB shot. Once inside, their tunnels may be both with and across the grain. They can exist under conditions of very low humidity. Sometimes dried pellets of excreta may drop from the entrance holes and give warning of their presence.



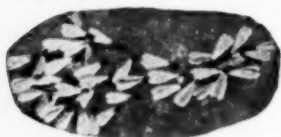
To test the soundness of wood members of a structure, use a sharp instrument such as an ice pick or knife. Begin with timbers nearest the ground level, if you suspect subterranean termites are present. If the wood has been attacked extensively, the sharp instrument will penetrate easily, at some points portions of the timber may fall out exposing a series of tunnels, and possibly white ant-like workers may be seen obtaining food for the queen and young termites living in the nest. Look also for mud-encased tubes which bridge across masonry from soil to wood. These resemble misplaced sections of "pointing up" on masonry. Only at the time of the colonizing flight can the reproductive forms tolerate drying by exposure to air. The wood-destroying workers are very susceptible to drying and never voluntarily come out into the open. If cracks have developed within foundation walls, the termites may tunnel into sills without being exposed, and without giving any indication of their presence.

Careful examination of a building for soundness will often reveal other kinds of insect damage. If pin holes and powdery wood dust are observed, there is or has been an infestation of powder post beetles, Carpenter ants cut holes about the diameter of a lead pencil and throw out coarse sawdust as they excavate their nests. Termites never produce sawdust, for wood is their staff of life. *Dry rot* is caused by a fungus which leaves the wood uniformly crumbly. There are no distinct tunnels following the grain. Occasionally, however, dry rot and termites operate simultaneously to destroy wood.

If you doubt your own conclusions, send specimens of the insects and wood fragments for identification to your State Agricultural Experiment Station or to your County Agricultural Agent Ask



Termites hide in the wood they destroy. Usually you never know you have termites in your home until they have done serious, costly damage. Sometimes, in advanced stages of termite attack, you may discover these danger signals:



### Swarmers Termites

In the Spring or Fall you may see "flying ants" near your home. These are likely to be swarming termites leaving their ground nests to start new colonies. This is a definite warning of an active termite infestation nearby—possibly in your home.



### Termite Tubes

Thin mud-like tubes on the foundation walls or pillars under your house are a sure sign of termite attack. Termites build these tubes from their ground nests to reach the wood in your home.



### "Rotted" Wood

Termite damage is frequently mistaken for rot...and rot often follows termite damage. If you find honey-combed and riddled wood around your house, it's definite evidence that termites have begun their destructive work.

As termite exterminator advertising goes, the accompanying advertisement is fairly free from objectionable claims. On the other hand, it does contain some misleading statements, such as "In the Spring or Fall you may see 'flying ants' near your home. These are likely to be swarming termites . . . . The truth is that they are likely to be flying ants. One reputable pest control operator says that all of his termite calls in one year were false alarms — all the invasions were by flying ants. It was, however, very hard to convince some home owners that they didn't have termites and did not require a major operation."

Pests, a trade journal for pest control operators, recently wrote editorially concerning a woman who was victimized by a bill of about \$1800 in an "attempt" to free her home of termites, only to be told later that further treatment was required at an additional charge of \$600. It is to the credit of the industry that its trade journal unqualifiedly objects to such racketeering. The consumer should be prepared, however, to guard against unscrupulous operators in the pest control field, many of whom go on the theory of charging all that the customers appear willing to stand for.

for practical purposes a negligible risk. [Italics—CR's.] It is true, however, that where termites have been in buildings for many years—as indicated by emerging swarms of the winged forms—the foundation timbers, and even the floors and adjacent woodwork, may have become so weakened as to make necessary some replacements."

When subterranean termites are present, corrective action will probably fall into three categories: (1) structural changes and replacement, (2) soil poisoning, and (3) drainage, ventilation, and removal of wood debris.

The basic idea involved in structural termite-proofing is the breaking of the connection between the earth and the wood structure. This may involve extensive foundation repairs and the necessary replacement of infested and weakened wood with chemically impregnated materials. In new construction, termite-proofing centers on the proper foundation masonry and may include installation of termite shields made of metal. The best control for subterranean termites is proper construction and good maintenance. After a building is completed, corrective construction of a termite-proofing nature may be very costly. (This is often coupled with chemical controls.)

The use of soil poisons is an attack on the termites themselves in an effort to kill those present and to discourage the establishment of colonies in the future. Soil fumigants are chemicals such as ortho-

dichlorobenzene, paradichlorobenzene, and trichlorobenzene, which volatilize into a gaseous state. As the gas permeates the pores in the soil, it kills the termites which it reaches. After a time, when the gas has been dissipated, other termites can establish another colony. In an effort to get longer-lasting control, other chemicals such as coal-tar creosote, pentachlorophenol, and DDT have been used alone or in combination with fumigants. These materials are all applied in a trench dug around the

for your State Experiment Station's recommendations on the control of termites.

There is usually no cause for excitement, if termites are found present; take a little time to arm yourself with information before you go into action. A supplemental reading list is appended to this article. According to Thomas E. Snyder in *Our Enemy the Termite*, "Official records indicate that the collapse of a building in continental United States on account of termite damage is so rare as to be

structure. They are poisonous and should be handled carefully. If a soil treatment is to be made, shrubs should be removed temporarily or their roots walled off with impervious paper. If such shrubbery must be removed, there will in general be less shrub mortality, due to transplanting, if the work is done in the fall season. The success of a soil poisoning treatment will depend upon the character and moisture content of the soil, kind and amount of materials used, and the manner of their application.

Aids to termite suppression are drainage of soil and cross ventilation at ground level beneath buildings. Such practices help reduce moisture content of the soil, which is vital for the survival of these termites. Removal of old stumps, of remnants of lumber thrown under a porch or unexcavated portion, and of wooden concrete forms often eradicates the focus of infestation. Make your premises uninviting to termites by setting up an unfavorable environment containing as little food as possible.

If the infestation consists of dry-wood termites, the corrective work will probably include: (1) structural replacements, (2) timber treatments and residual controls, or (3) possibly fumigation of the building.

Foundation wood which has been weakened by dry-wood termites should be replaced with chemically impregnated timbers. A roof which has been weakened is best remedied by the use of structural steel. For new construction, wood which has been impregnated under pressure with such chemicals as pentachlorophenol or with coal-tar creosote offers good protection. Surface coatings using DDT are a promising means of control since dry-wood termites attack the wood from the outside. The DDT method seems especially well adapted for use on wood of an already constructed building. Although such treatments must be repeated from time to time, they have the additional advantage of controlling certain other flying insects about houses. Light and diffused infestations have been controlled by boring holes into the timbers and introducing a toxic insecticide dust into each nest. If the infestation is general throughout the building, fumigation by a properly qualified professional may prove to be the most economical approach to getting rid of the pests, but remember that the effects of the fumigant are ended as soon as the building is aerated, and the building may quickly be reinfested. A sound preventive measure which has other advantages than termite exclusion is the covering of all openings, even attic ventilators, with fine-mesh wire screen (no larger than 18 x 14 mesh).

The information supplied by your State Experiment Station will enable you to identify the suspected insects and give the materials and methods of dealing with them which have proved most successful for your area. After studying the data furnished, you may feel confident that you can com-

plete the work by yourself. This may constitute a considerable saving, since the greatest cost on a termite suppression job is the labor cost. However, if you wish to contract for this work, outline what you want done and used in the light of the information received from the publications referred to, and then ask some competent pest control operators to *bid on your specifications*. A small amount of inquiry should give you the names of several competent firms.

As in many types of pest control, termite prevention is in every way more satisfactory than cure. Subterranean termite-proofing raises initial construction costs by only 1 to 2 percent; dry-wood termite-proofing increases costs by approximately 10 percent, but this expenditure also provides some protection against decay and fire.

### ***Suggested Sources for Additional Information***

#### **Federal and State Government Bulletins**

U. S. D. A., Farmers' Bulletin No. 1911, Preventing damage to buildings by subterranean termites and their control. Revised 1946. Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. Price 10c.

U. S. D. A., Circular No. 683, Effectiveness of wood preservatives in preventing attack by termites. 1943. Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. Price 10c.

#### **Typical of State Bulletins Available for Residents of a Particular Region**

N. J. Agricultural Experiment Station, Circular 484, The prevention and control of termite damage. 1946. Rutgers University, New Brunswick, N. J. Free to N. J. residents; 5c a copy to out-of-state residents. Supply is limited.

Illinois Natural History Survey, Circular 41, How to recognize and control termites in Illinois. 1947. Illinois Natural History Survey, Natural Resources Bldg., Urbana, Ill. Free to Illinois residents; 10c a copy to out-of-state residents.

#### **Books**

Snyder, Thomas E. 1935. Revised 1948. *Our Enemy the Termite*. Comstock Publishing Co., Ithaca, N. Y. 261 pages, 84 illustrations.

Kofoed, Chas. A., and others. 1934. *Termites and Termite Control*. California Press, Berkeley, Calif. 759 pages, 182 figures.

#### **Industrial Bulletin**

Monsanto Technical Bulletin No. 0-13. *Chemicals for Termite Control*. May 1945. Monsanto Chemical Co., Organic Chemicals Division, St. Louis, Mo.

## Buying a Piano—II

MANY inquiries have reached CR regarding the so-called "spinet" pianos. This is a style which is supposed to resemble an early instrument, which was so named because of the fact that the quills which plucked the strings (as in the harpsichord) resembled thorns — Latin *spinæ*. Though there is a remote similarity in appearance, today's so-called spinets are not spinets at all, but merely very small upright pianos.

These instruments have been designed to simulate the various styles in furniture much sought after by housewives to fit in with their preferred interior decoration plan. Since a piano is a rather conspicuous article, it is in order that it should match the period of other furniture which constitutes the predominant character of the room. The manufacturers have met this need in making available Louis XIV, Chippendale, Queen Anne, Duncan Phyfe, Colonial, Sixteenth Century and other models.

If, however, the consumer is really aiming to purchase a *musical instrument*, he must understand that these pseudo-stylish spinets are likely to be of dubious value. What has been said about the undersized standard upright piano of today may be applied with even more emphasis in judging the qualities of "spinets." Though the resemblance to a spinet is confined to appearance only, the name and stylish aspects of the instruments seem to have caught on with the public, and the instruments have become very popular and are sold extensively. Dynamic diversity and tonal richness produced by complementing overtones present in the grand piano are almost nonexistent. Piano tuners express dislike for working on the spinets, because of their loss of intonation in a day or two. Nevertheless, salesmen will be most persuasive in dealing with the unwary and the musically inexperienced.

If there is need for a piano in the home, it must be accepted that the only *entirely satisfactory* medium for piano music is the grand piano. The second choice would be a *large sized upright* of good heritage. The current

small sized upright is a poor third. If you buy in the fourth category, the average spinet (and remember some makes are below average), you will no doubt find this miniature to be highly decorative, in line with your tastes in house furnishings and easy to move around. As for music, it will serve at best as only an inadequate and rarely satisfying means for fulfilling its function.

In the listings, which are for normal or full-sized upright pianos, except as noted, makers of spinets (or "consoles") are indicated. Recommendations of spinet pianos are, however, of a limited sort, as explained by the qualifications appearing in the text of this article. At this time, with so many shortages, a fully accurate evaluation of pianos is impossible to achieve. On the basis of present information and observation these pianos which may be regarded as recommended are included in the first group, headed by *A. Recommended*; the second, *B. Intermediate*, lists pianos considered of somewhat less desirable quality. These listings were prepared by a professional pianist, dean in one of our large universities, who has made careful study of the subject. Music schools have found the matter of upright pianos for practice purposes an increasingly difficult problem in view of the current tendency of manufacturers to produce smaller sized and less sturdy instruments than in previous years. A survey that was conducted recently gives substantiation to opinions expressed in this article, and the ratings of pianos which follow.

### A. Recommended

*Acrosonic* (Baldwin Co., 1801 Gilbert Ave., Cincinnati)

A spinet of unusual quality.

*Baldwin* (Baldwin Co.)

*Chickering & Sons* (Aeolian American Corp., 27 W. 57 St., New York 19)

*Hamilton* (Baldwin Co.)

*Howard* (Baldwin Co.)

*Kimball* (W. W. Kimball Co., 306 S. Wabash Ave., Chicago 4) Also makes console pianos.

*Wm. Knabe & Co.* (Aeolian American Corp.)

*Mason & Hamlin* (Aeolian American Corp.) Old models.

*Steinway* (Steinway & Sons, 109 W. 57 St., New York 19)

*Weber* (Aeolian American Corp.)

## B. Intermediate

*Conover* (Conover-Cable Piano Co., Oregon, Ill., an affiliate of Winter & Co., Inc., 863 E. 141, New York 54) Console; spinet.  
*Everett* (Everett Piano Co., South Haven, Mich.)  
*Haddorff* (Haddorff Piano Co., 630 S. Wabash Ave., Chicago 5)  
*Hardman* (Hardman, Peck & Co., 33 W. 57 St., New York 19) Spinet.  
*Ivers & Pond* (Ivers & Pond Piano Co., Cambridge, Mass., an affiliate of Winter & Co., Inc.)  
*Krakauer Bros.* (Krakauer Bros., 25 W. 57 St., New York 19) Console.  
*Kranich & Bach* (Kranich & Bach, 237 E. 23, New York 10, an affiliate of Winter & Co., Inc.)  
*Pianino* (Steinway & Sons) Spinet.  
*Sohmer* (Sohmer & Co., Inc., 31 W. 57 St., New York 19) Spinet.  
*Stieff* (Charles M. Stieff, Inc., 315 N. Howard, Baltimore) Console.  
*Wurlitzer* (The Rudolph Wurlitzer Co., 165 W. Adams St., Chicago 3) Spinet.

\* \* \*

## Other Makes

As explained in Part I of this article (December 1948 BULLETIN, p. 16 f.), consumers who wish to purchase a particular piano will find it helpful to know trade names and the names of the present manufacturers. The following is a list of 42 other pianos which have not been rated (but which it is believed would not warrant an *A-Recommended* rating), and their present manufacturers. We shall be glad to have subscribers call to our attention any errors in this list.

*Bennett-Bretz* (Charles M. Stieff, Inc.)  
*Betsy Ross* (The Lester Piano Mfg. Co., Inc., Lester, Pa.) A spinet.  
*Bradbury* (Winter & Co., Inc.) Spinet.  
*Bush & Gerts* (Haddorff Piano Co.)  
*Cable* (Conover-Cable Piano Co., an affiliate of Winter & Co., Inc.)

*Cable-Nelson* (Everett Piano Co.) Console.  
*Chase & Baker* (Estey Piano Corp., Bluffton, Ind.)  
*Estey* (Estey Piano Corp.) Console.  
*Grandette* (Kranich & Bach, an affiliate of Winter & Co., Inc.) Console.  
*Gulbrandsen* (Gulbrandsen Co., 816 N. Kedzie Ave., Chicago 51)  
*Harrington* (Hardman, Peck & Co.) Moderately priced.  
*Jesse French* (Jesse French & Sons, Piano Div., H. & A. Selmer, Inc., Elkhart, New Castle, Ind.)  
*Kingsbury* (Conover-Cable Piano Co., an affiliate of Winter & Co., Inc.)  
*Krell* (The Starr Piano Co., Inc., Richmond, Ind.)  
*Lancaster* (Estey Piano Corp.) Console.  
*Lester* (The Lester Piano Mfg. Co., Inc.)  
*Livingston* (Weaver Piano Co., Inc., York, Pa.) Spinet.  
*Mansfield* (National Piano Corp., New York 2)  
*Marshall & Wendell* (Aeolian American Corp.) Spinet.  
*Mathushek* (Mathushek Piano Mfg. Co., 43 W. 57 St., New York 19) Spinet.  
*Mercer* (Weaver Piano Co., Inc.) Spinet.  
*Metropolitan* (Estey Piano Corp.)  
*Newby & Evans* (National Piano Corp.)  
*Poole* (Poole Piano Co., Cambridge, Mass., an affiliate of Winter & Co., Inc.)  
*Remington* (The Starr Piano Co., Inc.)  
*Richmond* (The Starr Piano Co., Inc.)  
*Schiller* (Conover-Cable Piano Co., an affiliate of Winter & Co., Inc.)  
*Schumann* (Estey Piano Corp.)  
*Shoninger* (National Piano Corp.) Console.  
*Spinetgrand* (Mathushek Piano Mfg. Co.)  
*Starck* (P. A. Starck Piano Co., 234 S. Wabash Ave., Chicago 4)  
*Starr* (The Starr Piano Co., Inc.) Spinet.  
*Steck* (Aeolian American Corp.) Spinet.  
*Story & Clark* (Story & Clark Piano Co., 64 E. Jackson Blvd., Chicago 4) Spinet.  
*Trayser* (The Starr Piano Co., Inc.)  
*Weaver* (Weaver Piano Co., Inc.) Spinet.  
*Wegman* (Estey Piano Corp.)  
*Wellington* (Conover-Cable Piano Co., an affiliate of Winter & Co., Inc.)  
*Weser Bros.* (Weser Piano Co., 520-528 W. 43 St., New York 18) Console.  
*Whitney* (W. W. Kimball Co.) Console.  
*Winter* (Winter & Co., Inc.) Spinet.  
*York* (Weaver Piano Co., Inc.) Spinet.

## Off the Editor's Chest

(Continued from page 2)

pendent that she enclosed a stamped addressed envelope. Frequently students writing for material or advice will ask on a postcard for that much information and more.

The teacher who permitted a student to write such an illiterate letter is lacking, it seems to us, in an understanding of the problem involved in such

inquiries and their educational value to the student. The effect of soap and cosmetics on the skin is discussed at least briefly in a dozen or more elementary textbooks and in books on chemistry and dermatology; some of them will surely be available in the nearest public library. Certainly a working knowledge of how to look up a topic in a card in-



dex, and how, in general, to use a library, are things every high school student ought to be expected to acquire.

Questions 3 and 4 lie in the realm of medicine, and intelligent handling of the problems calls for individual diagnosis by a physician specializing in dermatology and related matters; the student should be helped by the teacher to understand the need for that approach to individual health problems.

Questions 5 and 6 are questions of a legal nature that lie within the jurisdiction of the federal and state governments. No doubt information on both state and federal regulations in the field could be obtained by writing to the Secretary of State at the state capital, who would refer the letter to the proper bureau for reply.

If this letter and others, which are quoted herein were written entirely without teachers' supervision, that in itself brings to light a gross defect in the educational process. The lack of coherence in statement and proper framing of the questions noticeable in many such letters received at CR would seem to indicate that teachers do not concern themselves with what the student is doing, and thereby fail to give to the letter-writing project such educational advantages as it might have if letters were properly read, corrected, and supervised.

Then there is the student who has apparently been assigned the task of writing CR for information, on what or for what purpose he is often not at all clear in his own mind. Here, for example, is a request from a student in one of Chicago's better suburbs:

Will you please send me all of your reserch [sic] material on foods and soap and anything else that you have on hand.

And one from Wisconsin:

Our General Business class is studying "Getting Your Money's Worth in daily purchases." We are interested in any information you can give us on this subject. We are particularly interested in cosmetics, home permanents, and shampoos. We would like to know how often you publish these pamphlets or circuits [sic], the quality of goods and the cost.

The most sweeping request of all came from New York City:

In request of our business teacher I would be very grateful if you would please send me some pamphlets, pictures, and literature on Business. Or any information you are sending out on this coarse [sic].

We often wonder to what extent we are justified in using subscribers' funds, CR's only source of income, in answering such "unorganized," pointless letters. In the first place, we greatly doubt the value in the educational process of allowing a child to send out a poorly written, misspelled letter, in

which the questions are not understood or formulated by the writer, and are not expressed grammatically or in reasonably good form. In later life, he will discover that if he wishes attention to a complaint or an answer to a request for information, he will need to write plainly and intelligently to secure attention, and that his questions should be reasonably related to the work of the organization or business addressed and capable of being answered with a moderate expenditure of time and effort.

In the second place, where he should take the first step of securing the information (in part, at least) by the somewhat tedious task of painstakingly following up the references in a card catalog or index at the public library, it is a positive disservice to allow him to get the idea that the answers to his questions can be simply obtained by just writing to someone without even troubling to inquire whether his letter is being addressed to the right person or organization. On some questions the authorities will not be in agreement, and there may be no one definitive answer, or any simple answer the child could effectively use, for example, as to the question "what is good for an oily complexion."

The student who is led to believe that, by writing to CR or some other source, he can obtain just for the asking the information needed to write a term paper — and usually he must have the material by return mail to meet his deadline — will be rudely awakened when he tries to make a living to discover, if he should want to do an article for publication in a certain field, or secure data about the marketing of a given product, or simply information for his own use on what foods are the most effective in maintaining his health and which are the most economical for his pocketbook, that securing basic facts is time-consuming and often costly. There is no all-wise, omniscient source to which he can turn.

To acquire effective, worth-while information is a difficult process, and it means work and takes time — often involves a cash outlay. To fail to prepare a student to face these facts is to make him susceptible to the idea that instead of having to earn a living by work, he may get along by dint of a little luck in answering a simple question on a radio give-away program, or, failing that, he will come to the belief in the *Fuehrer* principle which many learned to accept during the war, who came to believe that "the government" will somehow see that their basic needs are cared for and will accept responsibility for supplying them with what they need in the way of reading matter, hygienic and medical advice and care, and the other thousand-and-one things that reduce living from an interesting adventure to a dull, and perhaps oppressive, routine.



# 35 mm. Cameras

## A. Recommended

**Voigtländer Vito** (Distributed by Willoughby's, Inc., 110 W. 32 St., New York 1) \$80.50 including federal tax. *Skopar* f:3.5 lens of 50 mm. focal length (not coated). Focusing from 3.5 ft. to infinity by rotation of front lens. *Compur Rapid* shutter with rated speeds of 1/500, 1/250, 1/100, 1/50, 1/25, 1/10, 1/5, 1/2, 1 second, and bulb. Time exposures can be made by setting shutter on "bulb," and using an auxiliary catch device on the base of the camera. Lacked built-in synchronizing device. Lens quality of sample examined only slightly inferior to that of *Kodak Anastigmat Special* f:3.5 on *Kodak 35* which was of good quality, reported in the December 1946 Bulletin. Shutter comparable with pre-war *Compur* shutters of same size; its speeds were



judged approximately proportional. Camera was well made and operated satisfactorily. Judged to be a somewhat better purchase than the *Ikonta 35* at \$83 listed in the December 1948 Bulletin. Used 20- or 36-exposure cartridges of the *Leica* type, or spools of the *Contax* type, with paper leaders. Picture size, 24 x 36 mm. (1 in. x 1 3/4 in.). The *Vito* is also available (\$69) with the same lens in *Prontor II* shutter, with built-in self-timer and flash synchronization; otherwise identical with model tested. 2

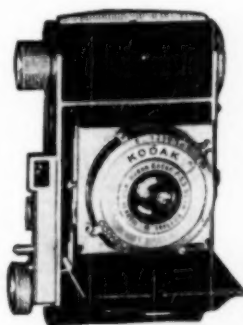
**Retina II** (Kodak AG Dr. Nagel-Werk, Stuttgart, Germany; distributed by Eastman Kodak Co., Rochester, N. Y.) \$198 including federal excise tax. *Schneider Xenon* f:2 coated lens of 50 mm. focal length. Focusing, by helical mount which moved entire lens, from 3.5 ft. to infinity. *Compur Rapid* shutter with rated speeds of 1/500, 1/250, 1/100, 1/50, 1/25, 1/10, 1/5, 1/2, 1 second, and bulb. Had coupled range-finder of superimposed-field type with single window for range-finder and view-finder. Lacked delayed action and built-in flash-synchronizing contacts. Had device for preventing double exposure. Range-finder found to be accurate. Quality of lens exceptionally good for an



f:2 lens; when stopped down to f:4, gave results almost as good as the *Skopar* f:3.5 (on *Vito* camera). Shutter speeds were approximately proportional. Camera was well constructed and of conveniently small size. Used 20- or 36-exposure rolls of perforated 35 mm. film. Picture size, 24 x 36 mm. (1 in. x 1 3/4 in.). 3

## B. Intermediate

**Ketina I** (Eastman Kodak Co., Rochester, N. Y.) \$73 including federal excise tax. Camera made in Germany, lens in U.S.A. *Ektar* f:3.5 coated lens of 50 mm. focal length. Focusing, by helical mount which moved entire lens, from 3.5 ft. to infinity. Standard *Compur Rapid* shutter with rated speeds of 1/500, 1/250, 1/100,



1/50, 1/25, 1/10, 1/5, 1/2, 1 second, and bulb. Except for lack of a range-finder, camera body was identical with that of *Retina II*. Quality of lens inferior to that of the *Kodak Anastigmat Special* f:3.5 (now known as *Anastar*), previously tested on the *Kodak 35*. Presumably another case of inadequate inspection and lack of uniformity of production as this lens was inferior to the 3-element *Cintar* and *Novar* lenses previously listed by CR on *Argus Markfinder* and *Ikonta 35*, respectively. Shutter speeds approximately proportional. Camera was well constructed. Size of picture and type of film used, same as *Retina II*. 2

# Abridged Cumulative Index of Previous 1949 Issues Consumers' Research Bulletin

	Month and Page
Allergy to cornstarch used on food cartons	Feb., 3
Anti-freeze solutions and brake fluids, caution in buying	Jan., 3
Automobile styling	Jan., 4
Automobiles, new, subscribers' reports	Jan., 15
fluid drives and automatic transmissions?	Jan., 19-20
secondhand, caution in buying	Jan., 3-4
Breath-modifier (Breath-o-lator)?	Jan., 34
Building, effect of new codes on high costs	Jan., 1
Camera, motion picture, war surplus?	Jan., 20
Cancer, effect of artificial environment factors	Feb., 3
Corrections and emendations?	Jan., 32-33
Deodorant, home (Odac)?	Feb., 30
Detergents, soapless, use	Feb., 3
Diapers?	Feb., 13-15
Dishes, plastic, for storing leftovers	Jan., 38
Dishwashing machine?	Feb., 25-26
Drier, plastic, for stockings (Saf-T-Dri)?	Jan., 38
Dry cleaning	Feb., 29

Eating, full vs. skimmed meals	Jan., 4
Editorial	each issue, page 2
Excise tax, federal, reduction under consideration	Jan., 4
Food, frozen, faulty packaging	Feb., 3
Freezers, home, increased sales	Feb., 30
Garbage disposal unit?	Feb., 5-9
Hair curling preparations, new capsule	Jan., 37-38
Heaters, room, fan-type electric?	Jan., 9-12
water, electric automatic storage?	Jan., 27-30
Ice-cube crusher (Tap-Ice)?	Jan., 38
Iron, electric, combination steam and dry type?	Jan., 5-8
Labels, directions on, importance	Feb., 4
Lighting, fluorescent, unflattering effect	Jan., 3
Loud-speakers?	Feb., 19-22
Meat for breakfast	Feb., 3
Meat supply	Feb., 3-4
grazing land occupied by national parks	Feb., 30
Motion pictures?	each issue
Oil burners and a boiler-burner unit?	Feb., 23-24
Oil, motor, misleading advertising?	Jan., 24
Phonograph	Feb., 16
needles, cactus?	Jan., 31-32
pickup cartridges?	Jan., 31-32

record-player-amplifier-speaker system?	Jan., 18
record brush (Universal)?	Feb., 30
records?	each issue
Photographic color film?	Jan., 8
Potatoes, high prices	Jan., 37
"Quality control," definition	Feb., 4
Radio receivers, FM, converter for?	Feb., 9
transformers, output, for audio amplifiers?	Feb., 15
Reducing preparation (Kyron)?	Feb., 4
Refrigerator "gadgets"?	Feb., 18
Sheet, crib, retested (Plastikool)?	Jan., 26
Shirt, man's white?	Jan., 33
Suits, men's, price decline	Jan., 3
Television sets, boosters for?	Feb., 17-18
Testimonials, standards for proper use	Jan., 4, 57
Tips, affected by high cost of living	Feb., 4, 29
Toilet tank ball (Aristocrat)?	Feb., 4
Tomatoes, canned?	Feb., 10-12
Tooth decay, and amount of meat eaten	Jan., 3
Towels, chemical for increasing absorbency (Sorbites)?	Jan., 4
Undershirts and shorts, men's?	Jan., 16-18
Utensils, cooking, copper-clad stainless steel?	Jan., 25
Vacuum cleaners, hand?	Jan., 13-15
Windows, double-glassed?	Jan., 21-24
Indicates that listings of names or brands are included	

## ★ ★ ★ Corrections and Emendations to Consumers' Research Annual Cumulative Bulletin (ACB) and Monthly Bulletins ★ ★ ★

Bicycles  
Page 7  
June '48 Bulletin

The names of American distributors of the two brands of English-made bicycles listed did not appear. They are as follows: *Raleigh* (Distributed by Raleigh Cycle Distributors, 669 Boylston St., Boston 16); *Royal Enfield* (was sold by Loomis Cycle Co., LaGrange, Ill.).

Anti-freeze  
Col. 431  
Annual Cumulative Bulletin '48-'49  
and  
Page 21  
Nov. '48 Bulletin

Under DENATURED ALCOHOL (ETHANOL), delete the following listings: *Blue Club*, *General Motors*, *Sentinel*, and *Montgomery Ward's Ice Guard*. These products, formerly made of ethanol, are now essentially methanol (poisonous) and are no longer recommended. Also delete *Ford* and *Mobil Freezone*, which now contain methanol (with isopropanol).

Anti-freeze  
Page 20  
Nov. '48 Bulletin

Recent information received by letter from the Aluminum Company of America indicates that sodium chromate or sodium dichromate, used as an inhibitor, is corrosive to aluminum cylinder heads and aluminum water pumps of automobile engines (Sodium chromate is a valuable

inhibitor of the corrosion of aluminum at room temperatures or lower, but is less successful at engine operating temperatures.) For the present, subscribers having cars equipped with aluminum cylinder heads or water pumps should avoid anti-freeze solutions and rust preventives which make use of chromate inhibitors. (Various commercial products sold by automobile service stations and garages for inhibiting the water in automobile cooling systems have contained chromates.)

Band Instruments  
Page 9, Col. 2  
Oct. '48 Bulletin

The Fred. Gretsch Manufacturing Company of Chicago, and Brooklyn, N. Y., the sole authorized distributors of *K. Zildjian* cymbals for the United States and Canada, has advised us that these cymbals are still being made in Turkey, and not in the United States as had been incorrectly reported to CR.

Cameras  
Page 32  
Dec. '48 Bulletin

*Argus C-3*. The lens of this camera, owing to a typographical error in the manuscript, was erroneously reported as having a maximum aperture of f:4.5. Actually, the lens of the *Argus C-3* was an *Argus Cintar f:3.5*.



# Ratings of Motion Pictures



THIS section aims to give critical consumers a digest of opinion from a wide range of motion picture reviews, including the motion picture trade press, leading newspapers and magazines—some 19 different periodicals in all. The motion picture ratings which follow thus do not represent the judgment of a single person, but are based on an analysis of critics' reviews.

The sources of the reviews are:

Box Office, *Charm*, *Chicago Daily Tribune*, *Cue*, *Daily News* (N.Y.), *The Exhibitor*, *Harvard*, *Reports*, *Motion Picture Herald*, *National Legion of Decency List*, *Newweek*, *New York Herald Tribune*, *New York Times*, *Parents' Magazine*, *Release of the D.A.R. Preview Committee*, *Successful Farming*, *Time*, *Variety* (weekly), *Weekly Guide to Selected Motion Pictures* (National Board of Review of Motion Pictures, Inc.), and *Unbiased Opinions of Current Motion Pictures* which includes reviews by the General Federation of Women's Clubs, the American Legion Auxiliary, National Film Music Council, and others.

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), or C (not recommended) on its entertainment values.

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

adr—adventure  
bio—biography  
c—in color (Technicolor, Cinecolor, Trucolor, Magnacolor, Vitacolor, etc.)  
car—cartoon  
com—comedy  
cri—crime and capture of criminals  
doc—documentary  
dr—drama  
fas—fantasy  
hist—historical incident  
mel—melodrama  
mus—musical  
mys—mystery  
nov—dramatization of a novel  
rom—romance  
soc—social-problem drama  
trav—travelogue  
war—dealing with the lives of people in wartime  
wes—western

A	B	C	
—	5	6	Abbott & Costello Meet Frankenstein.....com A
—	14	3	Accused, The.....cri-mel A
—	—	—	Act of Murder, An (See Live Today for Tomorrow)
1	6	4	Act of Violence, An.....war-mel A
—	7	4	Adventures of Don Juan.....adv-c A
—	4	5	Adventures of Gallant Beas.....wes-c AYC
—	3	4	Angel in Exile.....mel A
—	1	6	Angel on the Amazon.....dr A
—	7	—	Angry God, The.....dr-c A
1	11	1	Apartment for Peggy.....dr-c A
—	1	3	Appointment With Murder.....cri-mel A
—	—	3	Arkansas Swing, The.....mus-com AYC
2	7	8	Babe Ruth Story, The.....mus-biog AYC
—	2	2	Back Streets of Paris.....mel A
—	3	3	Back Trail.....wes AYC
—	5	1	Badmen of Tombstone.....wes A
—	4	2	Behind Locked Doors.....mel A
—	4	8	Belle Starr's Daughter.....wes A
—	2	1	Bells of the Old City.....com-c A
—	—	4	Betrayal, The.....mel A
—	11	2	Black Arrow, The.....adv AY
—	4	3	Black Eagle.....dr A
—	2	1	Blazing Across the Pecos.....mus-wes AYC
—	1	3	Blondie's Secret.....com AYC
—	10	5	Blood on the Moon.....wes A
—	4	6	Bodyguard.....mel AY
—	3	2	Borrowed Trouble.....wes AYC
—	2	2	Boston Blackie's Chinese Venture.....cri-mel AY
—	6	7	Boy with Green Hair, The.....fas AYC
—	1	6	Bungalow 13.....mys-mel A

A	B	C	
—	6	1	Cesar.....dr A
—	3	2	Champagne Charlie.....mus-com AY
—	4	4	Checkered Coat, The.....mel A
—	10	3	Chicken Every Sunday.....com A
—	5	4	Code of Scotland Yard.....cri-dr A
2	9	1	Command Decision.....war-dr AY
—	4	1	Corridor of Mirrors.....dr A
—	3	7	Countess of Monte Cristo, The.....mus-com A
—	1	5	Creep, The.....mel A
—	3	2	Crisis Cross.....cri-mel A
2	12	3	Cry of the City.....mel A
—	2	5	Daredevils of the Clouds.....mel AY
—	10	1	Dark Past, The.....cri-mel A
—	1	2	Dead Don't Dream, The.....wes AYC
—	3	9	Decision of Christopher Blake, The.....dr A
—	12	4	Deep Waters.....dr-c AYC
—	1	2	Denver Kid, The.....wes AYC
—	3	1	Desperadoes of Dodge City.....wes AYC
—	1	6	Disaster.....cri-mel A
1	2	—	Don't Take It to Heart.....com AYC
—	6	3	Dulcimer Street.....dr A
—	2	5	Dynamite.....mel AY
—	3	5	Eagle With Two Heads, The.....dr A
—	6	5	Embraceable You.....cri-mel A
3	9	3	Enchantment.....dr A
—	4	—	Eternal Husband, The.....dr A
—	11	5	Every Girl Should Be Married.....com AY
—	3	2	Eyes of Texas, The.....mus-wes-c A
—	6	1	Family Honey-moon.....com AYC
—	10	4	Fighter Squadron.....war-mel-c A
—	1	4	Fighting Back.....mel AYC
—	5	—	Fighting O'Flynn, The.....nov-c AY
—	3	—	Foolish Husbands.....com A
—	8	9	For the Love of Mary.....mus-com AY
—	5	6	Force of Evil.....cri-dr A
—	5	2	Four Steps in the Clouds.....com A
—	6	6	Gallant Blade, The.....mel-c AYC
—	2	6	Gentleman from Nowhere, The.....mys A
—	2	7	Girl from Manhattan, The.....com AY
—	1	3	Golden Eye, The.....cri-mel AY
—	9	10	Good Sam.....com A
—	4	1	Grand Canyon Trail.....mus-wes AYC
—	1	3	Gun Smugglers.....wes AYC
—	—	3	Gunning for Justice.....wes AYC
—	9	5	Hamlet.....dr A
—	—	6	Harpoon.....mel A
—	8	1	He Walked By Night.....cri-mel A
—	3	—	Henry, the Rainmaker.....com AYC
—	2	1	Her Man Gilbey.....com A
—	4	5	High Fury.....dr A
—	3	1	Highway 13.....mel A
—	1	11	Hills of Home.....dr-c AYC
—	8	7	Hollow Triumph.....mel A
—	2	3	Homicide for Three.....mys-mel A
—	—	4	Honorable Catherine, The.....com A
—	1	3	I Cheated the Law.....cri-dr A
—	4	3	I Surrender Dear.....mus-com AY
—	3	3	In This Corner.....mel A
—	—	4	Incident.....mel AY
—	—	4	Indian Agent.....wes AYC
—	—	4	Inner Sanctum.....mys-mel A
—	6	9	Innocent Affair, An.....mus-com A
—	—	4	Interlude.....dr A
—	4	10	Isn't It Romantic?.....mus-com A
—	2	2	Jiggs and Maggie in Court.....com AYC
—	8	8	Joan of Arc.....dr AY
—	—	5	Joe Palooka in Winner Take All.....mel AY
—	2	14	Johnny Belinda.....dr A
—	1	13	Julia Misbehaves.....com A
—	1	11	June Bride.....com A
—	—	4	Jungle Goddess.....dr AY
—	—	2	Jungle Jim.....mel AY
—	1	8	Jungle Patrol.....war-mel A
—	—	5	Just William's Luck.....com A

A	B	C			A	B	C		
3	8	3	Key Largo.....	mel A	—	11	6	Rope, The.....	crs-dr-c A
—	7	1	Kidnapped.....	mel AYC	—	—	3	Rossini.....	mus-biog A
—	—	3	King of the Bandits.....	wes AYC	—	4	3	Rusty Leads the Way	dr AYC
—	5	6	Kiss the Blood off My Hands.....	crs-mel A	—	2	5	Ruy Blas.....	hist-dr AY
—	8	5	Kissing Bandit, The.....	mus-com-c A	1	9	8	Saxon Charm, The	dr A
—	2	2	Ladies of the Chorus.....	mus-com A	—	7	11	Sealed Verdict.....	war-dr A
—	—	6	Lady at Midnight.....	mys-mel AY	5	8	—	Secret Land, The	doc-c AY
1	9	4	Larceny.....	mel A	—	—	3	Secrets of a Ballerina	dr A
—	5	—	Last of the Wild Horses.....	wes-c A	—	1	3	Shanghai Chest, The	mys-mel AY
—	3	5	Leather Gloves.....	mel A	—	1	4	Shed No Tears.....	cri-mel A
—	4	9	Let's Live a Little.....	com A	—	3	1	Shep Comes Home	dr AYC
—	12	2	Letter to Three Wives, A.....	dr A	—	1	4	Singin' Spurs.....	mus-wes AYC
2	7	9	Live Today for Tomorrow.....	dr A	—	2	1	Sinister Journey.....	wes AY
—	3	—	Loaded Pistols.....	mus-wes AYC	—	—	7	Siren of Atlantis.....	fan A
—	4	2	Long Is the Road.....	propaganda-dr A	—	1	7	Smart Girls Don't Talk	cri-mel A
5	7	—	Louisiana Story.....	mus-doc AYC	—	2	2	Smugglers Cove.....	mel AY
8	6	—	Loves of Carmen, The.....	dr-c A	4	8	8	Snake Pit, The.....	mel A
—	1	2	Loves of Casanova.....	mus-dr A	2	8	2	So Dear to My Heart	mus-car-c AYC
—	1	5	Loves of Don Juan, The.....	dr A	—	9	2	Sofia.....	mus-mel-c A
10	5	—	Luck of the Irish, The.....	fan AYC	—	2	1	Son of God's Country	wes AYC
—	9	6	Luxury Liner.....	mus-com-c AYC	8	9	—	Song Is Born, A.....	mus-com-c A
—	—	3	Lysistrata.....	dr A	—	1	3	Sons of Adventure.....	mys-mel AY
1	3	7	Macbeth.....	dr AY	—	11	7	Sorry, Wrong Number	mel A
—	8	4	Man from Colorado, The.....	wes-c AY	—	4	1	S.O.S. Submarine.....	war-doc AY
—	2	3	Manhattan Angel.....	mus-com AY	8	6	—	Southern Yankee, A.....	com AYC
—	2	4	Marriage in the Shadows.....	war-dr A	—	5	3	Spirit and the Flesh, The	nce A
—	2	2	Marshal of Amarillo.....	wes AYC	—	5	3	Spiritualist, The.....	mys-mel A
—	3	1	Merry Chase, The.....	com A	—	9	3	Station West.....	mus-mel A
—	5	6	Mexican Hayride.....	com A	—	—	5	Strange Mrs. Crane, The	cri-mel A
—	2	4	Million Dollar Weekend.....	mus-mel A	—	2	4	Strange Victory.....	doc A
—	7	6	Mine Own Executioner.....	mel A	—	2	4	Street Corner.....	dr A
—	4	1	Miracle in Harlem.....	mus-mel-c A	1	16	—	Street With No Name, The	cri-mel A
—	2	3	Miraculous Journey.....	mel-c AYC	—	5	—	Strike It Rich.....	dr A
—	4	1	Miranda.....	com A	—	4	1	Sun Comes Up, The.....	mus-dr-c AYC
12	2	—	Miss Tatlock's Millions.....	com A	1	7	3	Symphonic Pastorale.....	dr A
—	1	5	Mlle. Desirée.....	dr A	2	10	6	Tap Roots.....	dr-c A
—	8	1	Monsieur Vincent.....	dr A	—	3	7	Texas, Brooklyn and Heaven	com A
—	3	3	Monte Cassino.....	war-dr AY	—	9	9	That Lady in Ermine.....	mus-com-c A
—	2	6	Moonrise.....	dr A	—	7	7	That Wonderful Urge.....	com A
—	2	4	Mozart Story, The.....	mus-dr A	—	1	10	This Was A Woman.....	dr A
11	3	—	Mr. Peabody and the Mermaid.....	fan A	—	8	6	Three Godfathers.....	wes-c AY
—	7	1	Mr. Perrin and Mr. Trull.....	dr A	2	9	4	Three Musketeers, The	dr-c AY
—	4	4	Murderers Among Us.....	war-dr A	—	2	4	Timber Trail, The.....	mus-wes-c AYC
—	3	1	Music Man.....	mus-com AY	—	2	3	Tragic Hunt.....	dr A
—	3	8	My Dear Secretary.....	com A	—	2	2	Trail to Laredo.....	mus-wes AYC
—	2	7	My Own True Love.....	war-dr A	—	1	6	Train to Alcatraz.....	mel A
11	8	—	Night Has a Thousand Eyes.....	mel A	—	—	3	Triggleman.....	wes AYC
—	5	—	Night Time in Nevada.....	mus-wes-c AYC	—	1	7	Triple Threat.....	dr AYC
—	6	4	Night Wind.....	dr AY	—	2	1	Trouble Preferred.....	mel A
—	6	8	No Minor Vices.....	com A	—	3	2	Troublemakers.....	com AYC
—	9	3	Northwest Stampede.....	mel-c AYC	1	7	1	Twisted Road, The.....	cri-dr A
—	1	3	Old-Fashioned Girl, An.....	mus-dr AYC	—	7	5	Two Guys from Texas.....	mus-com-c AY
—	3	—	Olympic Cavalcade.....	doc AYC	—	9	7	Unfaithfully Yours.....	com A
—	3	8	One Sunday Afternoon.....	mus-com-c A	—	1	3	Unknown Island.....	dr-c A
—	7	9	One Touch of Venus.....	mus-fan A	—	2	6	Untamed Breed, The.....	wes-c A
—	1	5	Out of the Storm.....	mys-mel AY	—	2	5	Urubu.....	adv A
—	—	3	Outlaw Brand.....	mus-wes AYC	—	—	5	Vacation Days.....	mus-wes AYC
—	14	6	Paleface, The.....	mus-com-c A	—	1	4	Valiant Hombre, A.....	mel AYC
—	1	4	Parole, Inc.....	cri-mel A	—	3	7	Variety Time.....	mus-com AY
—	3	3	Piccadilly Incident.....	war-dr A	—	8	8	Velvet Touch, The.....	dr A
1	10	4	Pitfall, The.....	mel A	—	—	—	Wake of the Red Witch.....	adv AY
—	1	4	Plot to Kill Roosevelt, The.....	cri-mel A	1	5	3	Walk a Crooked Mile.....	mel A
—	6	4	Plunderers, The.....	mus-wes-c A	—	5	10	Walls of Jerico, The.....	dr A
—	5	2	Portrait of Jennie.....	dr-c A	—	2	1	Waterloo Road.....	war-dr A
—	1	3	Prairie, The.....	hist-nov A	—	2	4	What's On Your Mind.....	doc A
—	2	5	Private Life of An Actor.....	biog A	—	1	2	When Love Calls.....	mus-dr A
—	5	1	Quiet Weekend, A.....	dr AY	—	12	4	When My Baby Smiles at Me.....	mus-com-c A
—	2	12	Race Street.....	cri-mel A	—	2	4	Where Words Fall.....	mus-dr A
—	8	7	Rachel and the Stranger.....	mus-dr A	—	4	8	Whiplash.....	mel A
—	2	4	Racing Luck.....	dr AYC	—	—	3	Whispering City.....	mys-mel A
—	—	3	Range Renegades.....	mus-wes AYC	—	5	3	Whispering Smith.....	mel-c AY
—	—	5	Rangers Ride, The.....	mus-wes AYC	—	—	3	White Stallion.....	wes AYC
6	11	1	Red River.....	wes-dr A	—	5	1	Winner's Circle, The.....	dr-c AYC
—	8	5	Red Shoes, The.....	mel-c AY	—	—	3	Without Prejudice.....	dr A
—	7	5	Return of October, The.....	com-c A	1	7	5	Words and Music.....	mus-com A
—	4	—	Return of Wildfire, The.....	wes-c AYC	—	7	4	Yellow Sky.....	wes A
—	8	7	Road House.....	mus-mel A	—	14	2	You Gotta Stay Happy.....	com A
—	8	5	Rogues' Regiment.....	war-mel A	—	—	—	Your Red Wagon (See Twisted Road, The)	
—	3	3	Room Upstairs, The.....	dr A					

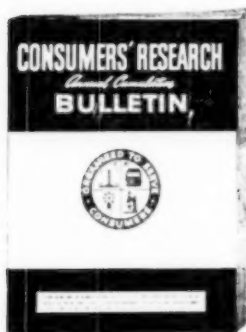
# The Consumers Observation Post

(Continued from page 4)

HIGH-FIDELITY RADIO SETS that are currently available are rather feeblely designed, in the opinion of a writer to the editor of Electronics. The primary reason for failure of sets to reproduce music satisfactorily is ascribed to wave-form distortion, which the extended frequency range of the so-called high-fidelity set makes intolerable to the ear. Good quality high-fidelity sets cost more to produce, and the magazine's correspondent comments that manufacturing executives too often excuse their failures of design by saying that the public "has a tin ear" and "no one would pay the price" for a high-fidelity set. They should see the volume of letters that a single item on the subject in a CR Bulletin brings forth. The only subject of correspondence that has rivaled high-fidelity in CR subscribers' interest is automobiles.

\*\*\*

LAUNDRY SOAP, whether it be an alkali-soap mixture or one of the new synthetic detergents, must produce a foamy lather, or the housewife thinks it is no good. That observation comes from the editor of the trade journal Soap and Sanitary Chemicals who also notes that the average housewife ignores directions on the box and uses far more soap or detergent than is needed to do the job. The uptrend in the use of the small washing machine will, the editor feels, be helpful to the soap business. The housewife who knows that small economies can be important may well study her present practices in using soap and other detergent products.



**READY IN  
SEPTEMBER**

*It's not too early to place an advance order  
for the forthcoming*

## 1949-50 Annual Cumulative Bulletin!

### MEMO: To Subscribers

We are now accepting advance orders for the 1949-50 edition of the Annual Cumulative Bulletin which is expected to be ready for mailing the latter part of September, 1949. Please remember that the Annual

Cumulative Bulletin is not included in a subscription to Consumers' Research Bulletin. It is mailed to you only if you send in an order for it accompanied by the remittance indicated. Since the Annual Cumulative Bulletin is a confidential issue, it is available only to individuals for their personal use and that of their immediate families. Orders are not accepted for library, school, corporation, or group use of any kind. Convenient order blanks will be enclosed with subscription renewal notices sent out during the coming months.

The Annual Cumulative Bulletin summarizes a wide range of previous findings (up to June) in one handy compact volume, fully indexed for ready reference. It also presents new information in certain fields that has never before appeared in any CR Bulletin. The 1949-50 edition is priced at \$1.75 to individual subscribers; \$2.75 to other individuals.

**To place an order now, use the convenient order blank on the next page.**



WHAT FOODS constitute an adequate diet? Shall we willy nilly force a quart of milk a day on everyone throughout the world? An interesting answer is provided by the studies of Dr. Robert S. Harris and his associates at the Nutritional Biochemistry Laboratory at M.I.T. In working on a feeding program for the starving and undernourished in foreign lands, Dr. Harris found that people can often be fed on their own native foods better and more cheaply than on those produced in the U.S.A. In Mexico, for example, children from large families with an income of only 35 cents a day were found no more undernourished than were middle-class children in Michigan. On the positive side Dr. Harris discovered that one Indian tribe with a daily menu of beans, pulque, chili peppers, wild greens, and tortillas had a better diet for health than many adult workers in the United States.

...

NEW AND SHINY ALUMINUM GARAGE DOORS may be attractive, but it looks as though a good many of them are much too light for their purpose. As a result they soon bend out of shape with use, and often become completely useless.

...

#### RECENTLY TESTED:

Comb Cleaner (B. E. Scanlan, Omaha, Nebr.), 10 cents at variety chain stores, is a small stiff rotating brush which works quite effectively in cleaning combs. The device is not too well finished, though doubtless good enough for its purpose. It is judged to be good value for the price.

Corodex (Allied Products Co., Chicago 13), a rust remover, was found on analysis to consist essentially of: sulfuric acid, 1.7%; ortho phosphoric acid, 23%; oxalic acid, 0.3%; water, 75%. Cleaning of rusted articles is accomplished by immersion of an item in Corodex in a pottery, china, or glass vessel. On account of the toxic character of the substances present, the product must be used with reasonable care, and it must not be used on anything which would be harmed by contact with a strong acid. Directions are given on the label for internal antidotes to be used in case of poisoning. There is, of course, special danger if the product should come into contact with the eyes, and pains should be taken that the liquid does not get into the hands of children at any time; care should be used, too, to avoid any spillage on hands, face, or other parts of the body, or into an open cut or wound. Clothing, shoes, etc., would be damaged by contact with Corodex.

## Consumers' Research, Inc. Washington, N. J.

Please enter my order as checked. It is understood that my handling of any CR material which is marked "The analyses of commodities, products, or merchandise appearing in this issue of the Consumers' Research Bulletin are for the sole information of Consumers' Research subscribers" will be in accordance with that direction.

NAME \_\_\_\_\_  
(PLEASE SIGN IN LONGHAND)  
STREET \_\_\_\_\_  
CITY & ZONE \_\_\_\_\_ STATE \_\_\_\_\_  
BUSINESS OR PROFESSION \_\_\_\_\_

CR-149

Please check your preference:

☐ I enclose \$1.75 (Canada & foreign, \$2.00) for a copy of the 1949-50 Annual Cumulative Bulletin. Since I am a subscriber to Consumers' Research Bulletin (12 issues), I am entitled to the special rate.

☐ I enclose \$4.75 (Canada & foreign, \$5.25) for one year's subscription to Consumers' Research Bulletin monthly (12 issues) AND the new 1949-50 Annual Cumulative Bulletin when it is ready in September 1949.

☐ New ☐ Renewal

☐ I enclose \$3 (Canada & foreign, \$3.50) for one year's subscription to Consumers' Research Bulletin monthly (12 issues).

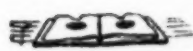
☐ New ☐ Renewal

☐ I enclose \$2.75 (Canada & foreign, \$3.00) for a subscription to the 1949-50 Annual Cumulative Bulletin alone when it is ready in September 1949.





# Phonograph Records



By Walter F. Gruening

Please Note: In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended.

## ORCHESTRA

**Dvorak: Symphony No. 5 ("New World").** Stokowski and His Symphony Orchestra. 10 sides, RCA Victor Set DV 25. \$11. Another animated, assured Stokowski recording of this popular symphony! Loud passages sound hard and jumbled and high frequencies heard on the finest records of today are absent. Pressed on vinylite. The best of the competition, Ormandy-Columbia Set 570, offers a straightforward performance with wider range and clearer recording. Ormandy wins.

**Interpretation AA  
Fidelity of Recording A**

**Haydn: Symphony No. 96.** Concertgebouw Orchestra of Amsterdam under van Beinum. 6 sides, English Decca Set 84. \$7.35. Spirited work which ranks among Haydn's better symphonies. Full bodied recording with good depth and range. In this respect, slightly superior to the Bruno Walter-Victor Set 885, though some may prefer more intimate recording for Haydn. Performance more crisp and powerful than Walter's. Decca's surfaces, though audible, are less so than Victor's. Overall, Decca wins.

**Interpretation AA  
Fidelity of Recording AA**

**Mendelssohn: Incidental Music to A Midsummer Night's Dream.** NBC Symphony Orchestra, Edna Phillips (soprano), Women's Chorus under Toscanini. 8 sides, RCA Victor Set 1280. \$6. The atmosphere of Fairyland has never been more marvelously suggested. Performance — a masterpiece of interpretation. But audible surfaces and opaque, limited-range recording detract from listening pleasure. Overall, the set just tops the older, ably performed Rodzinski-Columbia 504 which covers, substantially, the same ground.

**Interpretation AA  
Fidelity of Recording B**

**Mozart: Symphony No. 39.** Cleveland Orchestra under Szell. 6 sides, Columbia Set 801. \$4.75. Good humored, great work. Musicianship, unified, precise performance. Recording lacks detail though it is wide range. (The LP pressing one side of ML 4109, \$4.85 — sounds about the same except that surface noise is barely audible on the LP.) Competitive Beecham-Columbia Set 456 is more warmly performed and recorded but surfaces are noisier. Little need to replace Beecham.

**Interpretation AA  
Fidelity of Recording A**

**Tchaikovsky: Symphony No. 3 ("Polish").** Royal Philharmonic Orchestra under Beecham. 10 sides, RCA Victor Set 1279. \$7.25. Relatively a less important work disclosing ideas, here and there, that Tchaikovsky developed far more ingeniously in later symphonies. Played with refinement and subtlety and recorded with bloom and power though not so transparently and wide ranged as many other English sets. Superior to Kindler-Victor Set 747.

**Interpretation AA  
Fidelity of Recording A**

**Wagner: Tristan und Isolde — Prelude and Love-Death.** Chicago Symphony Orchestra under Rodzinski. 4 sides, RCA Victor Set DV 21 (vinylite). \$5. Among Wagner's most moving pages. Though Rodzinski reads without excesses, the dignity and fervor of the Furtwängler-Victor Set 653 (no longer catalogued) are absent. Rodzinski's recording offers brighter, coarser highs and quieter surfaces.

**Interpretation A  
Fidelity of Recording A**

**Wagner: Die Walküre — Wotan's Farewell and Magic Fire Music.** Philharmonic-Symphony Orchestra of New York under Stokowski. 4 sides, Columbia Set MX 301. \$3.50. Standard repertoire played with persuasive restraint. Yet, I miss the voice of Wotan. Violins faintly recorded, cellos and brass roundly recorded. Pressed on audible surfaces.

**Interpretation AA  
Fidelity of Recording A**

## CONCERTO

**Cimarosa: Oboe Concerto in C.** Miller (oboe) with the Saitenberg Little Symphony under Saitenberg. 4 sides, Mercury Set 6. \$2.89. Masterful performance of a delightful eighteenth century work. Wide range, recording though strangely, strings lack bite.

**Interpretation AA  
Fidelity of Recording A**

**Haydn: Violin Concerto No. 1.** Stern (violin) with String Orchestra. 6 sides, Columbia Set 799. \$4.75. Engaging work played *con amore*. Excellent recording.

**Interpretation AA  
Fidelity of Recording AA**

**Vivaldi: Concerti Delle Stagioni.** Kaufman (violin) with the Concert Hall Society String Orchestra under Swoboda. 12 sides, Concert Hall Sets AR1 and 2. \$14.70. Eighteenth century program music depicting the four seasons. Played in the original solo form in contrast to Cetra-Soria Set 107 which presents the Molinari orchestral arrangement. Kaufman is gifted and impelling but lush tone is not one of his attributes. The recording fails to bring out sufficient orchestral detail and sounds strident at times. Quiet plastic surfaces. One album would have been sufficient and would have lowered the cost. Better recorded than the Cetra-Soria set.

**Interpretation A  
Fidelity of Recording A**

## CHAMBER AND INSTRUMENTAL

**Encores.** First Piano Quartet. 6 sides, RCA Victor Set 1263. \$6. Four piano arrangements of "Liebestraum," "Polichinello," "Moment Musical," etc., which I prefer in their original form. Commendable team play and recording.

**Interpretation AA  
Fidelity of Recording AA**

**French Organ Music.** Biggs (organ). 10 sides, Columbia Set 802. \$7.25. Seven exhilarating, melodic numbers by Widor, Gigout, Boellmann, Dupré, etc. Played with the right zest and freshness. Recorded in St. Paul's Chapel, Columbia University, with appropriate resonance and acceptable frequency and dynamic range. Issued in the new box-type album, which helps to keep out dust.

**Interpretation AA  
Fidelity of Recording A**

**Historical Organ Series.** Volume I: Pre-Bach. Volume II: Bach. Mario Salvador (organ). Each set 8 sides, \$6.83. Gregorian Institute of America, Toledo, Ohio. Volume I includes short compositions by Merulo, Gigault, Frescobaldi, Titelouze and others suggesting the wealth of organ literature before Bach. Volume II includes three Bach Preludes and Fugues. Salvador, of the Gregorian Institute organ faculty, is a comprehending, sensitive musician. Organ voices not easily separated due to echo and, perhaps, microphone placement. In soft passages surfaces are audible. Some sides slip on the record changer causing disturbing pitch variations.

**Interpretation AA  
Fidelity of Recording B**

**Loeillet: Trio Sonata in D Minor (3 sides) & Telemann: Trio Sonata in E Minor — Second Movement only (1 side).** Mann, Wann, Weiss-Mann (recorder, oboe, cembalo) & Telemann: Trio Sonata for Recorder, Concertized Cembalo & Organ. Mann, Weiss-Mann, White (4 sides). Technichord Set 13. \$6.25. The music is about 200 years old with honors going to the Loeillet Sonata. Vigorous, dynamic performance which the engineer has balanced well except for a rather distant oboe. Otherwise, recorded effectively. Quiet surfaces. Score furnished.

**Interpretation A  
Fidelity of Recording A**

